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PCT

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<p>(21) International Application Number: PCT/US98/06956</p> <p>(22) International Filing Date: 10 April 1998 (10.04.98)</p> <p>(30) Priority Data: 08/837,312 10 April 1997 (10.04.97) US</p> <p>(71) Applicant: GENETICS INSTITUTE, INC. [US/US]; 87 CambridgePark Drive, Cambridge, MA 02140 (US).</p> <p>(72) Inventors: JACOBS, Kenneth; 151 Beaumont Avenue, Newton, MA 02160 (US). MCCOY, John, M.; 56 Howard Street, Reading, MA 01867 (US). LAVALLIE, Edward, R.; 113 Ann Lee Road, Harvard, MA 01451 (US). RACIE, Lisa, A.; 124 School Street, Acton, MA 01720 (US). MERBERG, David; 2 Orchard Drive, Acton, MA 01720 (US). TREACY, Maurice; 93 Walcott Road, Chestnut Hill, MA 02167 (US). SPAULDING, Vikki; 11 Meadowbank Road, Billerica, MA 01821 (US). AGOSTINO, Michael, J.; 26 Wolcott Avenue, Andover, MA 01810 (US).</p> <p>(74) Agent: SPRUNGER, Suzanne, A.; Genetics Institute, Inc., 87 CambridgePark Drive, Cambridge, MA 02140 (US).</p>		<p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>Without international search report and to be republished upon receipt of that report.</i></p>
<p>(54) Title: SECRETED EXPRESSED SEQUENCE TAGS (sESTs)</p> <p>(57) Abstract Secretd expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.</p>		

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5 FIELD OF THE INVENTION

BACKGROUND OF THE INVENTION

Although this "shortcut" approach to genomic sequencing presents savings of effort compared to sequencing of the complete genome, it still produced a vast array of ESTs which may not be directly useful as protein therapeutics. To date, the majority of protein-related drug discovery has focused on the use of secreted proteins to produce a desired therapeutic effect. Since the EST approach theoretically identifies all expressed proteins, it produces an EST library which contains a mixture of secreted proteins (such as hormones, cytokines and receptors) and non-secreted proteins (such as, for example, metabolic enzymes and cellular structural proteins), without identifying which ESTs correspond to proteins falling into either category. As a result, these methods are not optimally tailored to the needs of investigators searching for secreted proteins because they must separate the secreted "wheat" from the non-secreted "chaff", wasting effort and resources in the process.

Co-assigned U.S. Patent No. 5,536,637, which is incorporated herein by reference, provides methods for focusing genomic sequencing efforts on sequences encoding the secreted proteins which are of most interest for identification of protein therapeutics. The '637 patent
35 discloses a "signal sequence trap" which selectively identifies ESTs for secreted

proteins, namely "secreted expressed sequence tags" or "sESTs". It is to these sESTs that the present invention is directed.

SUMMARY OF THE INVENTION

5 The present invention provides for sESTs isolated from a variety of human RNA/cDNA sources.

In preferred embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

20 In other embodiments, the present invention provides an isolated polynucleotide
 consisting of a nucleotide sequence selected from the group consisting of:

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NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;

or a complement of said sequence.

In further embodiments, the present invention provides an isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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 10 NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;

or a complement of said sequence.

In yet other embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

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 15 NO:1481, SEQ ID NO:1482, SEQ ID NO:1483, SEQ ID NO:1484, SEQ ID
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 20 NO:1501, SEQ ID NO:1502, SEQ ID NO:1503, SEQ ID NO:1504, SEQ ID
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 NO:1509, SEQ ID NO:1510, SEQ ID NO:1511, SEQ ID NO:1512, SEQ ID
 NO:1513, SEQ ID NO:1514, SEQ ID NO:1515, SEQ ID NO:1516, SEQ ID
 NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;
 25 or to a complement of said sequence.

The invention also provides for proteins encoded by the above-described polynucleotides.

DETAILED DESCRIPTION

30 The nucleotide sequences of the sESTs of the present invention are reported in the
 Sequence Listing below. Table 2 lists the "Clone ID Nos." assigned by applicants to each
 SEQ ID NO: in the Sequence Listing.

Table 2

Each pair of entries in this table consists of the SEQ ID NO (e.g., 1, 2, etc.) followed by the Clone ID No. for such sequence (e.g., B11, B18, etc.).

	1	BK8	32	62	DY307	93	DY611
5	2	BV216	DW1001	63	DY643	94	EC259
	3	BV274	33 DW831	64	DY656	95	DY711
	4	BV48	34 DW859	65	DY675	96	EC248
	5	DN351	35 DW875	66	DY988	97	EC32
	6	DN381	36 DW888	67	DY992	98	DO703
10	7	DN405	37 DW901	68	DY225	99	DO713
	8	DU651	38 DW902	69	DY236	100	DR294
	9	DU660	39 DW904	70	DY242	101	DY1
	10	DU675	40 DW905	71	DY254	102	DY10
	11	DU684	41 DW906	72	DY914	103	DY106
15	12	DD364	42 DW929	73	DY946	104	DY117
	13	DD379	43 DW981	74	DY955	105	DY148
	14	DD389	44 DX191	75	DY959	106	DY167
	15	DD401	45 DX219	76	DY961	107	DY17
	16	DD413	46 DX245	77	DY981	108	DY174
20	17	DD426	47 DX256	78	DY357	109	DY175
	18	DD428	48 DX267	79	DY358	110	DY178
	19	DN293	49 DX66	80	DY381	111	DY23
	20	DD454	50 DX81	81	DY413	112	DY27
	21	DD472	51 DY780	82	DY414	113	DY41
25	22	DD475	52 DY803	83	DY415	114	DY42
	23	DT306	53 DY809	84	DY431	115	DY8
	24	DW282	54 DY814	85	DY433	116	DY93
	25	DW300	55 DY261	86	DY436	117	EB107
	26	DW303	56 DY264	87	DY543	118	EB113
30	27	DW323	57 DY266	88	DY565	119	EB163
	28	DT258	58 DY271	89	DY585	120	EB25
	29	DW246	59 DY287	90	DY331	121	EB77
	30	DW324	60 DY297	91	DY586	122	EC172
	31	DW333	61 DY306	92	DY696	123	EC302

	124	EC317	158	EJ90	192	EJ224	226	EP378
	125	EC328	159	EM270	193	EJ240	227	EP38
	126	EC341	160	EM278	194	EJ254	228	EO109
	127	EC349	161	EN186	195	EJ258	229	EO120
5	128	ED105	162	EN215	196	EJ265	230	EQ166
	129	ED21	163	EN217	197	EJ280	231	EQ187
	130	ED23	164	EN234	198	EJ285	232	EQ188
	131	ED30	165	EN239	199	EJ307	233	EQ190
	132	ED43	166	EN256	200	EJ38	234	EQ194
10	133	ED54	167	EN260	201	DO235	235	EQ207
	134	EE177	168	EN264	202	DO238	236	EQ208
	135	EE65	169	EN266	203	DO263	237	EQ214
	136	DQ365	170	EN271	204	DO319	238	EQ215
	137	DK393	171	EN274	205	EJ324	239	EQ218
15	138	DK399	172	EN287	206	EN470	240	EQ219
	139	DO1128	173	EN310	207	EN477	241	EQ220
	140	DO1150	174	EN342	208	EN539	242	EQ221
	141	DZ34	175	EN363	209	EP451	243	EQ226
	142	DZ42	176	EN423	210	EO10	244	EQ229
20	143	EE116	177	EH106	211	EO14	245	EQ230
	144	EE93	178	EH145	212	EO48	246	EQ231
	145	DJ387	179	EH166	213	EO58	247	EQ233
	146	DJ402	180	EH167	214	EO60	248	EQ237
	147	DN551	181	EH178	215	EO62	249	EQ261
25	148	DN559	182	EH180	216	EO68	250	EQ272
	149	DN603	183	EH186	217	EO89	251	ER104
	150	DN629	184	EH188	218	EO90	252	ER106
	151	DN631	185	EH189	219	EO92	253	ER128
	152	DO11	186	EH190	220	EO97	254	ER134
30	153	DO118	187	EH203	221	EP108	255	ER174
	154	DO15	188	EH206	222	EP165	256	ER201
	155	DO157	189	EH95	223	EP219	257	ER77
	156	DO19	190	EJ148	224	EP234	258	ER80
	157	EJ53	191	EJ179	225	EP277	259	ER97

	260	ES136	294	ER399	328	FB264	362	FG208
	261	ES306	295	ER408	329	FB38	363	FG265
	262	ES35	296	ER418	330	FB71	364	FG274
	263	ES37	297	ER430	331	FB78	365	FG278
5	264	ES206	298	ER471	332	FC12	366	FG281
	265	ET13	299	ER476	333	FB349	367	FG291
	266	ET22	300	ER493	334	FC136	368	FG294
	267	ET39	301	ER496	335	FC170	369	FG340
	268	ET84	302	ER498	336	FD152	370	FG363
10	269	EF121	303	ER524	337	FE141	371	FG372
	270	EF129	304	EW13	338	FE5	372	FG380
	271	EF45	305	EX25	339	FD131	373	FG401
	272	EF48	306	EX53	340	EC425	374	FG99
	273	EF5	307	EY165	341	EC428	375	FI203
15	274	EF88	308	EY29	342	ED204	376	FE311
	275	EG194	309	EZ35	343	ED205	377	FE315
	276	EG251	310	EZ4	344	ED210	378	FE322
	277	EH12	311	EZ88	345	ED223	379	FE329
	278	EH213	312	EZ93	346	DI301	380	FE341
20	279	EH22	313	FA8	347	DI303	381	FE366
	280	EH221	314	EV234	348	DI310	382	FE375
	281	EH248	315	EW101	349	DI39	383	FE412
	282	EH29	316	EW109	350	DJ90	384	FE415
	283	EH61	317	EW150	351	DM290	385	FE442
25	284	EH68	318	EY197	352	DM304	386	FE472
	285	EH78	319	EY206	353	DN618	387	FE557
	286	EH80	320	EY215	354	DN896	388	FE568
	287	ER311	321	EZ209	355	DN904	389	FE619
	288	ER329	322	FA139	356	FG119	390	FE676
30	289	ER343	323	FA171	357	FG126	391	FE682
	290	ER366	324	FA252	358	FG140	392	FF150
	291	ER369	325	FA28	359	FG193	393	FF153
	292	ER381	326	FA316	360	FG197	394	FF168
	293	ER395	327	FA95	361	FG198	395	FF175

	396	FF181	430	FH17	464	FN203	498	FO201
	397	FF46	431	FH170	465	FN228	499	FO209
	398	FF49	432	FH24	466	FN229	500	FO211
	399	FF97	433	FH3	467	FN251	501	FO215
5	400	FG41	434	FH39	468	FN254	502	FO253
	401	FG437	435	FH56	469	FP134	503	FO254
	402	FG441	436	FH6	470	FP14	504	FO261
	403	FG448	437	FH66	471	FP163	505	FO267
	404	FG45	438	FM109	472	FP172	506	FO275
10	405	FG492	439	FM13	473	FP71	507	FO290
	406	FG504	440	FM15	474	FP87	508	FO292
	407	FG565	441	FM150	475	EI118	509	FO316
	408	FG567	442	FM170	476	EI16	510	FO324
	409	FG57	443	FM28	477	EI187	511	FO327
15	410	FG577	444	FM3	478	EI203	512	FO348
	411	FG615	445	FM32	479	EI228	513	FO36
	412	FG625	446	FM36	480	EI231	514	FO38
	413	FG630	447	FM60	481	EI236	515	FO40
	414	FG659	448	FM86	482	EI239	516	FO66
20	415	FG708	449	FM95	483	EI243	517	FO75
	416	FG91	450	FM98	484	EI250	518	FP185
	417	FG884	451	FM99	485	EI255	519	FP193
	418	FG891	452	FN172	486	EI264	520	FP233
	419	FG909	453	FN19	487	EI273	521	FP239
25	420	FG912	454	FN29	488	FO11	522	FP246
	421	FG949	455	FN53	489	FO125	523	FP262
	422	FG952	456	FK199	490	FO128	524	FP268
	423	FG965	457	FK217	491	FO133	525	FP271
	424	FH10	458	FK23	492	FO135	526	FP273
30	425	FH116	459	FK32	493	FO147	527	FQ505
	426	FH123	460	FK59	494	FO152	528	DN647
	427	FH13	461	FK78	495	FO160	529	DN650
	428	FH136	462	FN189	496	FO173	530	DN676
	429	FH149	463	FN191	497	FO182	531	DO94

	532	FR292	566	DN827	600	FY201	634	DU4
	533	FR436	567	DN833	601	FY202	635	DU75
	534	FR451	568	DN834	602	FY243	636	FY386
	535	FR473	569	DN850	603	FY265	637	FY388
5	536	FS10	570	DO913	604	FY316	638	FY398
	537	FS106	571	DO923	605	FY318	639	FY414
	538	FS107	572	DO935	606	FY321	640	GA48
	539	FS143	573	DO938	607	FY354	641	GA63
	540	FS173	574	DO944	608	FY356	642	GA64
10	541	FS28	575	DO949	609	FY421	643	DT382
	542	FS31	576	DO952	610	FY430	644	DT385
	543	FS40	577	DQ12	611	FY455	645	DT388
	544	FV35	578	DT2	612	FY484	646	DT464
	545	FV49	579	DT44	613	FY524	647	DT470
15	546	FV68	580	DT53	614	FY530	648	DT478
	547	FW13	581	DT8	615	FY628	649	DT482
	548	FW64	582	FQ661	616	DQ242	650	DU114
	549	FY127	583	FQ672	617	DQ262	651	DU118
	550	FY136	584	FQ696	618	DQ276	652	DU123
20	551	FY60	585	FR1087	619	DQ285	653	DU133
	552	FY65	586	FR927	620	DQ304	654	DU156
	553	FY72	587	FR938	621	DQ313	655	DU157
	554	DN1112	588	FR980	622	DQ51	656	FZ5
	555	DN1118	589	FV122	623	DQ54	657	FZ87
25	556	DN1122	590	FV131	624	DR628	658	DW181
	557	DN782	591	FV132	625	GU215	659	DW309
	558	DN793	592	FV84	626	FM481	660	DX1
	559	DN795	593	FV85	627	DT117	661	DX15
	560	DN806	594	FV95	628	DT133	662	DX19
30	561	DN809	595	FX115	629	DT139	663	DX22
	562	DN810	596	FX127	630	DT164	664	DX29
	563	DN814	597	FX154	631	DU160	665	DX3
	564	DN815	598	FY187	632	DU164	666	DX4
	565	DN823	599	FY199	633	DU166	667	FZ428

	668	FZ163	702	FZ209	736	GE89	770	GF151
	669	DY474	703	FZ254	737	DY516	771	GF179
	670	FZ139	704	FZ346	738	DY529	772	GF99
	671	FX76	705	GA82	739	DY530	773	GB261
5	672	FX65	706	GA85	740	DY538	774	GC499
	673	FX55	707	GA91	741	DY830	775	GD177
	674	DU536	708	DX299	742	DY857	776	GD7
	675	FZ534	709	DX304	743	EA17	777	GE300
	676	DU515	710	DX309	744	EA36	778	DX179
10	677	DU475	711	DX316	745	GG73	779	DY757
	678	DU462	712	DX328	746	DU544	780	EC392
	679	DU353	713	DX336	747	DU560	781	EE15
	680	DU341	714	DX354	748	DZ109	782	DU408
	681	DU306	715	DX357	749	EA105	783	DU410
15	682	DU278	716	DX359	750	EA106	784	DU416
	683	DU244	717	DX363	751	EA110	785	DU447
	684	DU238	718	DX364	752	EA123	786	DX111
	685	DU236	719	DY478	753	EA46	787	DX112
	686	DU231	720	DY497	754	EA58	788	DX123
20	687	FZ639	721	DY508	755	EA7	789	DX138
	688	GC456	722	EA89	756	EA82	790	DX146
	689	GG126	723	EA9	757	GE361	791	DX153
	690	GG129	724	EA90	758	FZ510	792	DX157
	691	GG152	725	GC52	759	GE387	793	EE4
25	692	GG170	726	GC57	760	GE410	794	FZ676
	693	GG182	727	GC585	761	GE463	795	FZ683
	694	GG217	728	GC74	762	GE466	796	GD309
	695	GG440	729	GE28	763	GE468	797	GD358
	696	GG619	730	GE41	764	GE471	798	GG543
30	697	DX279	731	GE51	765	GE524	799	FX516
	698	DX288	732	GE60	766	GE539	800	FX536
	699	DX290	733	GE68	767	GE548	801	FZ1032
	700	DX295	734	GE80	768	GE549	802	FZ1041
	701	DX298	735	GE82	769	GE99	803	FZ1072

	804	FZ781	838	DD12	872	GP304	906	EM40
	805	GA147	839	DD127	873	GP329	907	EM42
	806	GA284	840	DD177	874	GP338	908	EM58
	807	DY723	841	DD204	875	GP340	909	GF185
5	808	DY737	842	DD207	876	GQ13	910	GF187
	809	DY739	843	DD211	877	GQ18	911	GF196
	810	EC399	844	DD217	878	GQ22	912	GF197
	811	EM254	845	DD504	879	GQ38	913	GF207
	812	FX194	846	DD509	880	GQ40	914	GF209
10	813	FX234	847	DD518	881	GQ56	915	GF212
	814	FX281	848	DD537	882	GQ6	916	GF218
	815	FX317	849	DD541	883	DD312	917	GF221
	816	FX353	850	DD71	884	DD352	918	GF222
	817	FX395	851	DH941	885	EK145	919	GF250
15	818	GA293	852	DQ194	886	EK208	920	GF255
	819	GA321	853	DQ204	887	EK223	921	GF256
	820	GA327	854	DQ215	888	EK234	922	GI28
	821	GB160	855	DQ216	889	EK480	923	GI3
	822	GA132	856	EK423	890	EK491	924	GI30
20	823	GA135	857	EK424	891	EK499	925	GI51
	824	GA205	858	EK450	892	EK571	926	GI63
	825	GB814	859	EL15	893	EK578	927	GI7
	826	GF87	860	DD285	894	EK581	928	GI74
	827	GG687	861	EK598	895	EK591	929	GI88
25	828	GG692	862	EK622	896	DD215	930	GI9
	829	GG694	863	EK626	897	EK634	931	DY874
	830	GG702	864	EK649	898	EL358	932	DY886
	831	GG705	865	GO653	899	EL360	933	DY900
	832	GP23	866	GP107	900	EL387	934	EM358
30	833	GP56	867	GP123	901	EL391	935	EM381
	834	GP61	868	GP168	902	EM111	936	EM386
	835	GP65	869	GP232	903	EM112	937	EM388
	836	DD115	870	GP274	904	EM12	938	EM396
	837	DD119	871	GP297	905	EM125	939	EM397

	940	EM401	974	GT43	1008	HU212	1042	EY290
	941	EM406	975	GT6	1009	HU141	1043	EY304
	942	EM408	976	HR712	1010	HS555	1044	EY313
	943	EM409	977	HR704	1011	HR95	1045	FK295
5	944	EM423	978	HR693	1012	HR906	1046	FK301
	945	EM424	979	HR628	1013	HR76	1047	FK317
	946	FE196	980	HR605	1014	HR753	1048	FK328
	947	FE204	981	EK341	1015	HR731	1049	FK349
	948	FE205	982	EK390	1016	EN116	1050	FK350
10	949	FE207	983	EN108	1017	EM341	1051	FK354
	950	FE215	984	FK235	1018	FJ283	1052	FK365
	951	FE222	985	GK428	1019	FJ307	1053	FQ105
	952	FE227	986	GT56	1020	FJ70	1054	FQ239
	953	FE228	987	FQ562	1021	FM176	1055	FQ360
15	954	FE248	988	FQ605	1022	FM197	1056	FQ45
	955	FE263	989	FQ608	1023	FM205	1057	GU353
	956	FE271	990	FQ609	1024	FM208	1058	GX167
	957	GF296	991	FQ612	1025	FM229	1059	GX183
	958	GN38	992	FS49	1026	FQ419	1060	GX208
20	959	GN45	993	FS87	1027	GX48	1061	GX210
	960	GN60	994	GM101	1028	GX5	1062	FM369
	961	GN68	995	GM103	1029	GX92	1063	FM375
	962	GN82	996	GM114	1030	FM289	1064	FM389
	963	GR286	997	GM129	1031	FM290	1065	FM432
25	964	EN10	998	GM153	1032	FM296	1066	FM459
	965	EN37	999	GM158	1033	FM300	1067	FM462
	966	FK127	1000	GM196	1034	FM312	1068	FM479
	967	FK151	1001	GM243	1035	GU512	1069	GX301
	968	GS26	1002	GM259	1036	GU534	1070	GX336
30	969	GS4	1003	GM266	1037	GU608	1071	GX354
	970	EV391	1004	HV38	1038	GX159	1072	GX361
	971	FG535	1005	HV23	1039	GX97	1073	GX403
	972	FG852	1006	HV199	1040	EW304	1074	GX408
	973	GT28	1007	HV181	1041	EY281	1075	GX418

	1076	GU830	1110	GG3	1144	GN97	1178	HE91
	1077	GU925	1111	HA510	1145	HB443	1179	HF289
	1078	GU940	1112	HA422	1146	HC324	1180	HG444
	1079	GX1031	1113	HA382	1147	HC327	1181	HF137
5	1080	GX496	1114	HA360	1148	HC505	1182	HD706
	1081	GX504	1115	HA249	1149	HC724	1183	HG710
	1082	GX509	1116	HA199	1150	HA1054	1184	HG733
	1083	GX536	1117	HA192	1151	HB1041	1185	HG775
	1084	GX540	1118	GZ568	1152	HB746	1186	HI222
10	1085	GX645	1119	GY520	1153	HB752	1187	HI39
	1086	GX700	1120	GY515	1154	HB975	1188	HH215
	1087	GX730	1121	GY330	1155	HC705	1189	HH357
	1088	GX750	1122	GY307	1156	HA791	1190	HH372
	1089	GX753	1123	HA81	1157	HC1002	1191	HH378
15	1090	GX760	1124	HA73	1158	HC1071	1192	HH390
	1091	GX814	1125	HA29	1159	HC1089	1193	HH396
	1092	GX851	1126	HA24	1160	HC831	1194	HH404
	1093	GX909	1127	HA18	1161	HC986	1195	HH433
	1094	GY102	1128	GZ78	1162	GY72	1196	HI2
20	1095	GY105	1129	GZ70	1163	HG159	1197	HH544
	1096	GY138	1130	GZ7	1164	HG620	1198	HH608
	1097	GY211	1131	GZ496	1165	HD161	1199	HH612
	1098	GX1082	1132	GZ495	1166	HD353	1200	HH625
	1099	GX1108	1133	GZ485	1167	HD378	1201	HH640
25	1100	GX1140	1134	GZ436	1168	HD417	1202	HH648
	1101	GX1165	1135	GZ420	1169	HD427	1203	HH691
	1102	GX576	1136	GZ378	1170	HD434	1204	HJ120
	1103	GX595	1137	GZ37	1171	HD499	1205	HJ140
	1104	GX606	1138	GY558	1172	HD569	1206	HJ181
30	1105	GX619	1139	GG894	1173	HD627	1207	HJ184
	1106	GG874	1140	GG907	1174	HD648	1208	HJ22
	1107	GG858	1141	GN114	1175	HE111	1209	HJ253
	1108	GG836	1142	GN115	1176	HE142	1210	HJ265
	1109	GG8	1143	GN145	1177	HE178	1211	HJ362

	1212	HJ395	1246	HM372	1280	HO722	1314	HT166
	1213	HJ411	1247	HM380	1281	HO799	1315	HT176
	1214	HJ444	1248	HM422	1282	HO801	1316	HT193
	1215	HJ65	1249	HM444	1283	HO817	1317	HT43
5	1216	HJ674	1250	HM497	1284	HO82	1318	HT81
	1217	HJ705	1251	HM544	1285	HK719	1319	HW149
	1218	HJ81	1252	HM643	1286	HO1077	1320	HW152
	1219	HJ862	1253	HN72	1287	HO1080	1321	HW190
	1220	HJ949	1254	HN78	1288	HO1087	1322	HW204
10	1221	HK10	1255	HO107	1289	HO1143	1323	HW221
	1222	HK26	1256	HO237	1290	HO1176	1324	HW243
	1223	HK60	1257	HO266	1291	HO1183	1325	HW261
	1224	HJ1037	1258	HO277	1292	HO1216	1326	HW368
	1225	HJ968	1259	HO283	1293	HO1271	1327	HW74
15	1226	HJ981	1260	HO292	1294	HO1329	1328	HX10
	1227	HJ994	1261	HO294	1295	HO1434	1329	HX102
	1228	HJ995	1262	HO305	1296	HO1441	1330	HX110
	1229	HK189	1263	HO315	1297	HO1453	1331	HX113
	1230	HK234	1264	HO332	1298	HO854	1332	HX155
20	1231	HK650	1265	HO358	1299	HO868	1333	HX188
	1232	HK658	1266	HO476	1300	HP262	1334	HX29
	1233	HK669	1267	HO481	1301	HQ36	1335	HX50
	1234	HK713	1268	HO502	1302	HQ72	1336	HY13
	1235	HK899	1269	HO54	1303	GM16	1337	HY3
25	1236	HE187	1270	HO60	1304	GM286	1338	HY55
	1237	HK162	1271	HO600	1305	GM295	1339	HY57
	1238	HL25	1272	HO617	1306	GM335	1340	HZ15
	1239	HL380	1273	HO640	1307	GM365	1341	HZ8
	1240	HL73	1274	HO663	1308	HR397	1342	IA1
30	1241	HM50	1275	HO688	1309	HR560	1343	IA21
	1242	HM54	1276	HO692	1310	HR593	1344	IA32
	1243	HM91	1277	HO693	1311	HR598	1345	IA36
	1244	HM236	1278	HO703	1312	HT13	1346	IB2
	1245	HM280	1279	HO717	1313	HT137	1347	IC2

	1348	IC9	1382	IA167	1413	HW786	1447	IE362
	1349	HY229	1383	IA183	1414	HW810	1448	IH32
	1350	HY244	1384	IA188	1415	HW846	1449	IJ113
	1351	HY344	1385	IA200	1416	HW849	1450	IJ101
5	1352	HY370	1386	IA220	1417	IB15	1451	IJ163
	1353	HY374	1387	IA64	1418	IB19	1452	IJ167
	1354	HY404	1388	IA69	1419	IB22	1453	IF28
	1355	HY419	1389	IA86	1420	IB28	1454	IF376
	1356	HY435	1390	HW936	1421	IB36	1455	IF456
10	1357	HZ103	1391		1422	IB49	1456	IF87
	1358	HZ109	HW1017		1423	IC103	1457	IJ1201
	1359	HZ111	1392		1424	IC126	1458	IJ1220
	1360	HZ115	HW1044		1425	IC132	1459	IJ1237
	1361	HZ71	1393		1426	IC142	1460	IJ1240
15	1362	HZ76	HW1059		1427	IC155	1461	IJ1247
	1363	HZ88	1394	HW430	1428	IC54	1462	IJ1287
	1364	HW115	1395	HW432	1429	IC87	1463	IJ1292
	1365	HW128	1396	HW440	1430	IC92	1464	IJ1299
	1366	HW477	1397	HW456	1431	IE146	1465	IJ583
20	1367	HW483	1398	HW518	1432	IE147	1466	IJ592
	1368	HW491	1399	HW591	1433	IE149	1467	IJ597
	1369	HW499	1400	HW598	1434	IE169	1468	IJ629
	1370	HW507	1401	HW627	1435	IZ6	1469	IJ638
	1371	HZ116	1402	HW646	1436	JE33	1470	IJ640
25	1372	HZ162	1403	HW649	1437	JE44	1471	IJ642
	1373	HZ185	1404	HW693	1438	JE52	1472	IJ686
	1374	HZ201	1405	HW695	1439	IE10	1473	IG25
	1375	HZ224	1406	HW697	1440	IE47	1474	IG35
	1376	HZ262	1407	HW711	1441	IE73	1475	IH40
30	1377	IA106	1408	HW715	1442	JA37	1476	IH54
	1378	IA110	1409	HW730	1443	JA78	1477	IJ288
	1379	IA114	1410	HW732	1444	JB12	1478	IJ76
	1380	IA153	1411	HW741	1445	JB23	1479	IF292
	1381	IA157	1412	HW750	1446	IE352	1480	IF513

	1481	IF548	1515	IQ58
	1482	IJ1043	1516	IS488
	1483	IJ1048	1517	IS564
	1484	IJ1054	1518	IT23
5	1485	IJ1088	1519	IT44
	1486	IJ777		
	1487	IJ887		
	1488	IJ907		
	1489	IJ928		
10	1490	IJ942		
	1491	IL1		
	1492	IL100		
	1493	IL112		
	1494	IL28		
15	1495	IK11		
	1496	IK14		
	1497	IK20		
	1498	IK203		
	1499	IK209		
20	1500	IK212		
	1501	IK343		
	1502	IK73		
	1503	IO134		
	1504	IO138		
25	1505	IO151		
	1506	IO202		
	1507	IO209		
	1508	IO31		
	1509	IO356		
30	1510	IO420		
	1511	IO62		
	1512	IQ15		
	1513	IQ45		
	1514	IQ55		

The "Clone ID No." for a particular clone consists of one or two letters followed by a number. The letters designate the tissue source from which the sEST was isolated. Table 3 below lists the various sources which were run through applicants' signal sequence trap. Thus, the tissue source for a particular sEST sequence can be identified in Table 3 by the one and two letter designations used in the relevant "Clone ID No.". For example, a clone designated as "BA312" would have been isolated from a human placenta (26 yrs.) library (i.e., selection "BA") as indicated in Table 3.

As used herein, "polynucleotide" includes single- and double-stranded RNAs, DNAs and RNA:DNA hybrids.

As used herein a "secreted" protein is one which, when expressed in a suitable host cell, is transported across or through a membrane, including transport as a result of signal sequences in its amino acid sequence. "Secreted" proteins include without limitation proteins secreted wholly (e.g., soluble proteins) or partially (e.g., receptors) from the cell in which they are expressed. "Secreted" proteins also include without limitation proteins which are transported across the membrane of the endoplasmic reticulum.

Fragments of the proteins of the present invention which are capable of exhibiting biological activity are also encompassed by the present invention. Fragments of the protein may be in linear form or they may be cyclized using known methods, for example, as described in H.U. Saragovi, *et al.*, Bio/Technology 10, 773-778 (1992) and in R.S. McDowell, *et al.*, J. Amer. Chem. Soc. 114, 9245-9253 (1992), both of which are incorporated herein by reference. Such fragments may be fused to carrier molecules such as immunoglobulins for many purposes, including increasing the valency of protein binding sites. For example, fragments of the protein may be fused through "linker" sequences to the Fc portion of an immunoglobulin. For a bivalent form of the protein, such a fusion could be to the Fc portion of an IgG molecule. Other immunoglobulin isotypes may also be used to generate such fusions. For example, a protein - IgM fusion would generate a decavalent form of the protein of the invention.

The present invention also provides both full-length and mature forms of the disclosed proteins. The full-length form of the such proteins is identified in the sequence listing by translation of the nucleotide sequence of each disclosed clone. The mature form of such protein may be obtained by expression of the disclosed full-length polynucleotide (preferably those deposited with ATCC) in a suitable mammalian cell or other host cell. The sequence of the mature form of the protein may also be determinable from the amino acid sequence of the full-length form.

The present invention also provides genes corresponding to the cDNA sequences disclosed herein. The corresponding genes can be isolated in accordance with known methods using the sequence information disclosed herein. Such methods include the preparation of probes or primers from the disclosed sequence information for identification
5 and/or amplification of genes in appropriate genomic libraries or other sources of genomic materials.

Where the protein of the present invention is membrane-bound (e.g., is a receptor), the present invention also provides for soluble forms of such protein. In such forms part or all of the intracellular and transmembrane domains of the protein are deleted such that
10 the protein is fully secreted from the cell in which it is expressed. The intracellular and transmembrane domains of proteins of the invention can be identified in accordance with known techniques for determination of such domains from sequence information.

Species homologs of the disclosed polynucleotides and proteins are also provided by the present invention. Species homologs may be isolated and identified by making
15 suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source from the desired species.

The invention also encompasses allelic variants of the disclosed polynucleotides or proteins; that is, naturally-occurring alternative forms of the isolated polynucleotide which also encode proteins which are identical, homologous or related to that encoded by the
20 polynucleotides disclosed herein.

The invention also includes polynucleotides with sequences complementary to those of the polynucleotides disclosed herein.

The present invention also includes polynucleotides capable of hybridizing, preferably under reduced stringency conditions, more preferably under stringent conditions,
25 most preferably under highly stringent conditions, to polynucleotides described herein. Examples of stringency conditions are shown in Table 1 below: highly stringent conditions are those that are at least as stringent as, for example, conditions A-F; stringent conditions are at least as stringent as, for example, conditions G-L; and reduced stringency conditions are at least as stringent as, for example, conditions M-R.

Table 1

	Stringency Condition	Polynucleotide Hybrid	Hybrid Length (bp) ²	Hybridization Temperature and Buffer ¹	Wash Temperature and Buffer ¹
5	A	DNA:DNA	≥ 50	65°C; 1xSSC -or- 42°C; 1xSSC, 50% formamide	65°C; 0.3xSSC
	B	DNA:DNA	< 50	T _B *; 1xSSC	T _B *; 1xSSC
	C	DNA:RNA	≥ 50	67°C; 1xSSC -or- 45°C; 1xSSC, 50% formamide	67°C; 0.3xSSC
	D	DNA:RNA	< 50	T _D *; 1xSSC	T _D *; 1xSSC
	E	RNA:RNA	≥ 50	70°C; 1xSSC -or- 50°C; 1xSSC, 50% formamide	70°C; 0.3xSSC
10	F	RNA:RNA	< 50	T _F *; 1xSSC	T _F *; 1xSSC
	G	DNA:DNA	≥ 50	65°C; 4xSSC -or- 42°C; 4xSSC, 50% formamide	65°C; 1xSSC
	H	DNA:DNA	< 50	T _H *; 4xSSC	T _H *; 4xSSC
	I	DNA:RNA	≥ 50	67°C; 4xSSC -or- 45°C; 4xSSC, 50% formamide	67°C; 1xSSC
	J	DNA:RNA	< 50	T _I *; 4xSSC	T _I *; 4xSSC
15	K	RNA:RNA	≥ 50	70°C; 4xSSC -or- 50°C; 4xSSC, 50% formamide	67°C; 1xSSC
	L	RNA:RNA	< 50	T _L *; 2xSSC	T _L *; 2xSSC
	M	DNA:DNA	≥ 50	50°C; 4xSSC -or- 40°C; 6xSSC, 50% formamide	50°C; 2xSSC
	N	DNA:DNA	< 50	T _N *; 6xSSC	T _N *; 6xSSC
	O	DNA:RNA	≥ 50	55°C; 4xSSC -or- 42°C; 6xSSC, 50% formamide	55°C; 2xSSC
20	P	DNA:RNA	< 50	T _P *; 6xSSC	T _P *; 6xSSC
	Q	RNA:RNA	≥ 50	60°C; 4xSSC -or- 45°C; 6xSSC, 50% formamide	60°C; 2xSSC
	R	RNA:RNA	< 50	T _R *; 4xSSC	T _R *; 4xSSC

[‡]: The hybrid length is that anticipated for the hybridized region(s) of the hybridizing polynucleotides. When hybridizing a polynucleotide to a target polynucleotide of unknown sequence, the hybrid length is assumed to be that of the hybridizing polynucleotide. When polynucleotides of known sequence are hybridized, the hybrid length can be determined by aligning the sequences of the polynucleotides and identifying the region or regions of optimal sequence complementarity.

[†]: SSPE (1xSSPE is 0.15M NaCl, 10mM NaH₂PO₄, and 1.25mM EDTA, pH 7.4) can be substituted for SSC (1xSSC is 0.15M NaCl and 15mM sodium citrate) in the hybridization and wash buffers; washes are performed for 15 minutes after hybridization is complete.

*T_B - T_R: The hybridization temperature for hybrids anticipated to be less than 50 base pairs in length should be 5-10°C less than the melting temperature (T_m) of the hybrid, where T_m is determined according to the following equations. For hybrids less than 18 base pairs in length, T_m(°C) = 2(# of A + T bases) + 4(# of G + C bases). For hybrids between 18 and 49 base pairs in length, T_m(°C) = 81.5 + 16.6(log [Na⁺]) + 0.41(%G+C) - (600/N), where N is the number of bases in the hybrid, and [Na⁺] is the concentration of sodium ions in the hybridization buffer ([Na⁺] for 1xSSC = 0.165 M).

Additional examples of stringency conditions for polynucleotide hybridization are provided in Sambrook, J., E.F. Fritsch, and T. Maniatis, 1989, *Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, chapters 9 and 11, and *Current Protocols in Molecular Biology*, 1995, F.M. Ausubel et al., eds., John Wiley & Sons, Inc., sections 2.10 and 6.3-6.4, incorporated herein by reference.

Preferably, such hybridizing polynucleotides have at least 70% sequence identity (more preferably, at least 80% identity; most preferably at least 90% or 95% identity) with the polynucleotide of the present invention to which they hybridize, where sequence identity is determined by comparing the sequences of the hybridizing polynucleotides when aligned so as to maximize overlap and identity while minimizing sequence gaps. The ~~isolated~~ polynucleotide encoding the protein of the invention may be operably linked to an expression control sequence such as the pMT2 or pED expression vectors disclosed in Kaufman *et al.*, Nucleic Acids Res. 19, 4485-4490 (1991), in order to produce the protein recombinantly. Many suitable expression control sequences are known in the art. General methods of expressing recombinant proteins are also known and are exemplified in R. Kaufman, Methods in Enzymology 185, 537-566 (1990). As defined herein "operably linked" means that the isolated polynucleotide of the invention and an expression control

sequence are situated within a vector or cell in such a way that the protein is expressed by a host cell which has been transformed (transfected) with the ligated polynucleotide/expression control sequence.

5 A number of types of cells may act as suitable host cells for expression of the protein. Mammalian host cells include, for example, monkey COS cells, Chinese Hamster Ovary (CHO) cells, human kidney 293 cells, human epidermal A431 cells, human Colo205 cells, 3T3 cells, CV-1 cells, other transformed primate cell lines, normal diploid cells, cell strains derived from in vitro culture of primary tissue, primary explants, HeLa cells, mouse L cells, BHK, HL-60, U937, HaK or Jurkat cells.

10 Alternatively, it may be possible to produce the protein in lower eukaryotes such as yeast or in prokaryotes such as bacteria. Potentially suitable yeast strains include *Saccharomyces cerevisiae*, *Schizosaccharomyces pombe*, *Kluyveromyces* strains, *Candida*, or any yeast strain capable of expressing heterologous proteins. Potentially suitable bacterial strains include *Escherichia coli*, *Bacillus subtilis*, *Salmonella typhimurium*, or any
15 bacterial strain capable of expressing heterologous proteins. If the protein is made in yeast or bacteria, it may be necessary to modify the protein produced therein, for example by phosphorylation or glycosylation of the appropriate sites, in order to obtain the functional protein. Such covalent attachments may be accomplished using known chemical or enzymatic methods.

20 The protein may also be produced by operably linking the isolated polynucleotide of the invention to suitable control sequences in one or more insect expression vectors, and employing an insect expression system. Materials and methods for baculovirus/insect cell expression systems are commercially available in kit form from, *e.g.*, Invitrogen, San Diego, California, U.S.A. (the MaxBac® kit), and such methods are well known in the art,
25 as described in Summers and Smith, Texas Agricultural Experiment Station Bulletin No. 1555 (1987), incorporated herein by reference. As used herein, an insect cell capable of expressing a polynucleotide of the present invention is "transformed."

The protein of the invention may be prepared by culturing transformed host cells under culture conditions suitable to express the recombinant protein. The resulting
30 expressed protein may then be purified from such culture (i.e., from culture medium or cell extracts) using known purification processes, such as gel filtration and ion exchange chromatography. The purification of the protein may also include an affinity column containing agents which will bind to the protein; one or more column steps over such affinity resins as concanavalin A-agarose, heparin-toyopearl® or Cibacrom blue 3GA

Sepharose®; one or more steps involving hydrophobic interaction chromatography using such resins as phenyl ether, butyl ether, or propyl ether; or immunoaffinity chromatography.

Alternatively, the protein of the invention may also be expressed in a form which will facilitate purification. For example, it may be expressed as a fusion protein, such as those of maltose binding protein (MBP), glutathione-S-transferase (GST) or thioredoxin (TRX). Kits for expression and purification of such fusion proteins are commercially available from New England BioLab (Beverly, MA), Pharmacia (Piscataway, NJ) and InVitrogen, respectively. The protein can also be tagged with an epitope and subsequently purified by using a specific antibody directed to such epitope. One such epitope ("Flag") is commercially available from Kodak (New Haven, CT).

Finally, one or more reverse-phase high performance liquid chromatography (RP-HPLC) steps employing hydrophobic RP-HPLC media, e.g., silica gel having pendant methyl or other aliphatic groups, can be employed to further purify the protein. Some or all of the foregoing purification steps, in various combinations, can also be employed to provide a substantially homogeneous isolated recombinant protein. The protein thus purified is substantially free of other mammalian proteins and is defined in accordance with the present invention as an "isolated protein."

The protein of the invention may also be expressed as a product of transgenic animals, e.g., as a component of the milk of transgenic cows, goats, pigs, or sheep which are characterized by somatic or germ cells containing a nucleotide sequence encoding the protein.

The protein may also be produced by known conventional chemical synthesis. Methods for constructing the proteins of the present invention by synthetic means are known to those skilled in the art. The synthetically-constructed protein sequences, by virtue of sharing primary, secondary or tertiary structural and/or conformational characteristics with proteins may possess biological properties in common therewith, including protein activity. Thus, they may be employed as biologically active or immunological substitutes for natural, purified proteins in screening of therapeutic compounds and in immunological processes for the development of antibodies.

The proteins provided herein also include proteins characterized by amino acid sequences similar to those of purified proteins but into which modification are naturally provided or deliberately engineered. For example, modifications in the peptide or DNA sequences can be made by those skilled in the art using known techniques. Modifications

of interest in the protein sequences may include the alteration, substitution, replacement, insertion or deletion of a selected amino acid residue in the coding sequence. For example, one or more of the cysteine residues may be deleted or replaced with another amino acid to alter the conformation of the molecule. Techniques for such alteration, substitution, replacement, insertion or deletion are well known to those skilled in the art (see, e.g., U.S. Patent No. 4,518,584). Preferably, such alteration, substitution, replacement, insertion or deletion retains the desired activity of the protein.

Other fragments and derivatives of the sequences of proteins which would be expected to retain protein activity in whole or in part and may thus be useful for screening or other immunological methodologies may also be easily made by those skilled in the art given the disclosures herein. Such modifications are believed to be encompassed by the present invention.

USES AND BIOLOGICAL ACTIVITY

The polynucleotides and proteins of the present invention are expected to exhibit one or more of the uses or biological activities (including those associated with assays cited herein) identified below. Uses or activities described for proteins of the present invention
5 may be provided by administration or use of such proteins or by administration or use of polynucleotides encoding such proteins (such as, for example, in gene therapies or vectors suitable for introduction of DNA).

Research Uses and Utilities

10 The polynucleotides provided by the present invention can be used by the research community for various purposes. The primary use of polynucleotides of the invention which are sESTs is as probes for the identification and isolation of full-length cDNAs and genomic DNA molecules which correspond (i.e., is a longer polynucleotide sequence of which substantially the entire sEST is a fragment in the case of a full-length cDNA, or
15 which encodes the sEST in the case of a genomic DNA molecule) to such sESTs. Techniques for use of such sequences as probes for larger cDNAs or genomic molecules are well known in the art.

The polynucleotides can also be used to express recombinant protein for analysis, characterization or therapeutic use; as markers for tissues in which the corresponding
20 protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in disease states); as molecular weight markers on Southern gels; as chromosome markers or tags (when labeled) to identify chromosomes or to map related gene positions; to compare with endogenous DNA sequences in patients to identify potential genetic disorders; as probes to hybridize and thus discover novel, related
25 DNA sequences; as a source of information to derive PCR primers for genetic fingerprinting; as a probe to "subtract-out" known sequences in the process of discovering other novel polynucleotides; for selecting and making oligomers for attachment to a "gene chip" or other support, including for examination of expression patterns; to raise anti-protein antibodies using DNA immunization techniques; and as an antigen to raise anti-
30 DNA antibodies or elicit another immune response. Where the polynucleotide encodes a protein which binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the polynucleotide can also be used in interaction trap assays (such as, for example, that described in Gyuris et al., Cell 75:791-803 (1993)) to identify

polynucleotides encoding the other protein with which binding occurs or to identify inhibitors of the binding interaction.

The proteins provided by the present invention can similarly be used in assay to determine biological activity, including in a panel of multiple proteins for high-throughput screening; to raise antibodies or to elicit another immune response; as a reagent (including the labeled reagent) in assays designed to quantitatively determine levels of the protein (or its receptor) in biological fluids; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in a disease state); and, of course, to isolate correlative receptors or ligand. Where the protein binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the protein can be used to identify the other protein with which binding occurs or to identify inhibitors of the binding interaction. Proteins involved in these binding interactions can also be used to screen for peptide or small molecule inhibitors or agonists of the binding interaction.

Any or all of these research utilities are capable of being developed into reagent grade or kit format for commercialization as research products.

Methods for performing the uses listed above are well known to those skilled in the art. References disclosing such methods include without limitation "Molecular Cloning: A Laboratory Manual", 2d ed., Cold Spring Harbor Laboratory Press, Sambrook, J., E.F. Fritsch and T. Maniatis eds., 1989, and "Methods in Enzymology: Guide to Molecular Cloning Techniques", Academic Press, Berger, S.L. and A.R. Kimmel eds., 1987.

Nutritional Uses

Polynucleotides and proteins of the present invention can also be used as nutritional sources or supplements. Such uses include without limitation use as a protein or amino acid supplement, use as a carbon source, use as a nitrogen source and use as a source of carbohydrate. In such cases the protein or polynucleotide of the invention can be added to the feed of a particular organism or can be administered as a separate solid or liquid preparation, such as in the form of powder, pills, solutions, suspensions or capsules. In the case of microorganisms, the protein or polynucleotide of the invention can be added to the medium in or on which the microorganism is cultured.

Cytokine and Cell Proliferation/Differentiation Activity

A protein of the present invention may exhibit cytokine, cell proliferation (either inducing or inhibiting) or cell differentiation (either inducing or inhibiting) activity or may induce production of other cytokines in certain cell populations. Many protein factors discovered to date, including all known cytokines, have exhibited activity in one or more factor dependent cell proliferation assays, and hence the assays serve as a convenient confirmation of cytokine activity. The activity of a protein of the present invention is evidenced by any one of a number of routine factor dependent cell proliferation assays for cell lines including, without limitation, 32D, DA2, DA1G, T10, B9, B9/11, BaF3, MC9/G, M+ (preB M+), 2E8, RB5, DA1, 123, T1165, HT2, CTLL2, TF-1, Mo7e and CMK.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for T-cell or thymocyte proliferation include without limitation those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, Immunologic studies in Humans); Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bertagnolli et al., *J. Immunol.* 145:1706-1712, 1990; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Bertagnolli, et al., *J. Immunol.* 149:3778-3783, 1992; Bowman et al., *J. Immunol.* 152: 1756-1761, 1994.

Assays for cytokine production and/or proliferation of spleen cells, lymph node cells or thymocytes include, without limitation, those described in: Polyclonal T cell stimulation, Kruisbeek, A.M. and Shevach, E.M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.12.1-3.12.14, John Wiley and Sons, Toronto. 1994; and Measurement of mouse and human Interferon γ , Schreiber, R.D. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.8.1-6.8.8, John Wiley and Sons, Toronto. 1994.

Assays for proliferation and differentiation of hematopoietic and lymphopoietic cells include, without limitation, those described in: Measurement of Human and Murine Interleukin 2 and Interleukin 4, Bottomly, K., Davis, L.S. and Lipsky, P.E. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.3.1-6.3.12, John Wiley and Sons, Toronto. 1991; deVries et al., *J. Exp. Med.* 173:1205-1211, 1991; Moreau et al., *Nature* 336:690-692, 1988; Greenberger et al., *Proc. Natl. Acad. Sci. U.S.A.* 80:2931-2938, 1983; Measurement of mouse and human interleukin 6 - Nordan, R. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.6.1-6.6.5, John Wiley

- and Sons, Toronto. 1991; Smith et al., Proc. Natl. Acad. Sci. U.S.A. 83:1857-1861, 1986; Measurement of human Interleukin 11 - Bennett, F., Giannotti, J., Clark, S.C. and Turner, K. J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.15.1 John Wiley and Sons, Toronto. 1991; Measurement of mouse and human Interleukin 9 -
- 5 Ciarletta, A., Giannotti, J., Clark, S.C. and Turner, K.J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.13.1, John Wiley and Sons, Toronto. 1991.
- Assays for T-cell clone responses to antigens (which will identify, among others, proteins that affect APC-T cell interactions as well as direct T-cell effects by measuring proliferation and cytokine production) include, without limitation, those described in:
- 10 *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function; Chapter 6, Cytokines and their cellular receptors; Chapter 7, Immunologic studies in Humans); Weinberger et al., Proc. Natl. Acad. Sci. USA 77:6091-6095, 1980; Weinberger et al., Eur. J. Immun.
- 15 11:405-411, 1981; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988.

Immune Stimulating or Suppressing Activity

- A protein of the present invention may also exhibit immune stimulating or immune
- 20 suppressing activity, including without limitation the activities for which assays are described herein. A protein may be useful in the treatment of various immune deficiencies and disorders (including severe combined immunodeficiency (SCID)), e.g., in regulating (up or down) growth and proliferation of T and/or B lymphocytes, as well as effecting the cytolytic activity of NK cells and other cell populations. These immune deficiencies may
- 25 be genetic or be caused by viral (e.g., HIV) as well as bacterial or fungal infections; or may result from autoimmune disorders. More specifically, infectious diseases caused by viral, bacterial, fungal or other infection may be treatable using a protein of the present invention, including infections by HIV, hepatitis viruses, herpesviruses, mycobacteria, Leishmania spp., malaria spp. and various fungal infections such as candidiasis. Of course,
- 30 in this regard, a protein of the present invention may also be useful where a boost to the immune system generally may be desirable, i.e., in the treatment of cancer.

Autoimmune disorders which may be treated using a protein of the present invention include, for example, connective tissue disease, multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, autoimmune pulmonary inflammation, Guillain-Barre

syndrome, autoimmune thyroiditis, insulin dependent diabetes mellitus, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. Such a protein of the present invention may also be useful in the treatment of allergic reactions and conditions, such as asthma (particularly allergic asthma) or other respiratory problems. Other
5 conditions, in which immune suppression is desired (including, for example, organ transplantation), may also be treatable using a protein of the present invention.

Using the proteins of the invention it may also be possible to immune responses, in a number of ways. Down regulation may be in the form of inhibiting or blocking an immune response already in progress or may involve preventing the induction of an immune
10 response. The functions of activated T cells may be inhibited by suppressing T cell responses or by inducing specific tolerance in T cells, or both. Immunosuppression of T cell responses is generally an active, non-antigen-specific, process which requires continuous exposure of the T cells to the suppressive agent. Tolerance, which involves inducing non-responsiveness or anergy in T cells, is distinguishable from
15 immunosuppression in that it is generally antigen-specific and persists after exposure to the tolerizing agent has ceased. Operationally, tolerance can be demonstrated by the lack of a T cell response upon reexposure to specific antigen in the absence of the tolerizing agent.

Down regulating or preventing one or more antigen functions (including without limitation B lymphocyte antigen functions (such as , for example, B7)), *e.g.*, preventing
20 high level lymphokine synthesis by activated T cells, will be useful in situations of tissue, skin and organ transplantation and in graft-versus-host disease (GVHD). For example, blockage of T cell function should result in reduced tissue destruction in tissue transplantation. Typically, in tissue transplants, rejection of the transplant is initiated through its recognition as foreign by T cells, followed by an immune reaction that destroys
25 the transplant. The administration of a molecule which inhibits or blocks interaction of a B7 lymphocyte antigen with its natural ligand(s) on immune cells (such as a soluble, monomeric form of a peptide having B7-2 activity alone or in conjunction with a monomeric form of a peptide having an activity of another B lymphocyte antigen (*e.g.*, B7-1, B7-3) or blocking antibody), prior to transplantation can lead to the binding of the
30 molecule to the natural ligand(s) on the immune cells without transmitting the corresponding costimulatory signal. Blocking B lymphocyte antigen function in this manner prevents cytokine synthesis by immune cells, such as T cells, and thus acts as an immunosuppressant. Moreover, the lack of costimulation may also be sufficient to anergize the T cells, thereby inducing tolerance in a subject. Induction of long-term tolerance by B lymphocyte antigen-

blocking reagents may avoid the necessity of repeated administration of these blocking reagents. To achieve sufficient immunosuppression or tolerance in a subject, it may also be necessary to block the function of a combination of B lymphocyte antigens.

The efficacy of particular blocking reagents in preventing organ transplant rejection
5 or GVHD can be assessed using animal models that are predictive of efficacy in humans. Examples of appropriate systems which can be used include allogeneic cardiac grafts in rats and xenogeneic pancreatic islet cell grafts in mice, both of which have been used to examine the immunosuppressive effects of CTLA4Ig fusion proteins *in vivo* as described in Lenschow *et al.*, Science 257:789-792 (1992) and Turka *et al.*, Proc. Natl. Acad. Sci
10 USA, 89:11102-11105 (1992). In addition, murine models of GVHD (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 846-847) can be used to determine the effect of blocking B lymphocyte antigen function *in vivo* on the development of that disease.

Blocking antigen function may also be therapeutically useful for treating
15 autoimmune diseases. Many autoimmune disorders are the result of inappropriate activation of T cells that are reactive against self tissue and which promote the production of cytokines and autoantibodies involved in the pathology of the diseases. Preventing the activation of autoreactive T cells may reduce or eliminate disease symptoms. Administration of reagents which block costimulation of T cells by disrupting receptor:ligand interactions of B
20 lymphocyte antigens can be used to inhibit T cell activation and prevent production of autoantibodies or T cell-derived cytokines which may be involved in the disease process. Additionally, blocking reagents may induce antigen-specific tolerance of autoreactive T cells which could lead to long-term relief from the disease. The efficacy of blocking reagents in preventing or alleviating autoimmune disorders can be determined using a number of
25 well-characterized animal models of human autoimmune diseases. Examples include murine experimental autoimmune encephalitis, systemic lupus erythematosus in MRL/lpr/lpr mice or NZB hybrid mice, murine autoimmune collagen arthritis, diabetes mellitus in NOD mice and BB rats, and murine experimental myasthenia gravis (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 840-856).

30 Upregulation of an antigen function (preferably a B lymphocyte antigen function), as a means of up regulating immune responses, may also be useful in therapy. Upregulation of immune responses may be in the form of enhancing an existing immune response or eliciting an initial immune response. For example, enhancing an immune response through stimulating B lymphocyte antigen function may be useful in cases of viral

infection. In addition, systemic viral diseases such as influenza, the common cold, and encephalitis might be alleviated by the administration of stimulatory forms of B lymphocyte antigens systemically.

Alternatively, anti-viral immune responses may be enhanced in an infected patient
5 by removing T cells from the patient, costimulating the T cells *in vitro* with viral antigen-pulsed APCs either expressing a peptide of the present invention or together with a stimulatory form of a soluble peptide of the present invention and reintroducing the *in vitro* activated T cells into the patient. Another method of enhancing anti-viral immune responses would be to isolate infected cells from a patient, transfect them with a nucleic acid encoding
10 a protein of the present invention as described herein such that the cells express all or a portion of the protein on their surface, and reintroduce the transfected cells into the patient. The infected cells would now be capable of delivering a costimulatory signal to, and thereby activate, T cells *in vivo*.

In another application, up regulation or enhancement of antigen function (preferably
15 B lymphocyte antigen function) may be useful in the induction of tumor immunity. Tumor cells (*e.g.*, sarcoma, melanoma, lymphoma, leukemia, neuroblastoma, carcinoma) transfected with a nucleic acid encoding at least one peptide of the present invention can be administered to a subject to overcome tumor-specific tolerance in the subject. If desired, the tumor cell can be transfected to express a combination of peptides. For example, tumor
20 cells obtained from a patient can be transfected *ex vivo* with an expression vector directing the expression of a peptide having B7-2-like activity alone, or in conjunction with a peptide having B7-1-like activity and/or B7-3-like activity. The transfected tumor cells are returned to the patient to result in expression of the peptides on the surface of the transfected cell. Alternatively, gene therapy techniques can be used to target a tumor cell for transfection
25 *in vivo*.

The presence of the peptide of the present invention having the activity of a B lymphocyte antigen(s) on the surface of the tumor cell provides the necessary costimulation signal to T cells to induce a T cell mediated immune response against the transfected tumor cells. In addition, tumor cells which lack MHC class I or MHC class II molecules, or
30 which fail to reexpress sufficient amounts of MHC class I or MHC class II molecules, can be transfected with nucleic acid encoding all or a portion of (*e.g.*, a cytoplasmic-domain truncated portion) of an MHC class I α chain protein and β_2 microglobulin protein or an MHC class II α chain protein and an MHC class II β chain protein to thereby express MHC class I or MHC class II proteins on the cell surface. Expression of the appropriate class I

or class II MHC in conjunction with a peptide having the activity of a B lymphocyte antigen (e.g., B7-1, B7-2, B7-3) induces a T cell mediated immune response against the transfected tumor cell. Optionally, a gene encoding an antisense construct which blocks expression of an MHC class II associated protein, such as the invariant chain, can also be cotransfected with a DNA encoding a peptide having the activity of a B lymphocyte antigen to promote presentation of tumor associated antigens and induce tumor specific immunity. Thus, the induction of a T cell mediated immune response in a human subject may be sufficient to overcome tumor-specific tolerance in the subject.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for thymocyte or splenocyte cytotoxicity include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, *Immunologic studies in Humans*); Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Takai et al., *J. Immunol.* 140:508-512, 1988; Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bowman et al., *J. Virology* 61:1992-1998; Takai et al., *J. Immunol.* 140:508-512, 1988; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Brown et al., *J. Immunol.* 153:3079-3092, 1994.

Assays for T-cell-dependent immunoglobulin responses and isotype switching (which will identify, among others, proteins that modulate T-cell dependent antibody responses and that affect Th1/Th2 profiles) include, without limitation, those described in: Maliszewski, *J. Immunol.* 144:3028-3033, 1990; and Assays for B cell function: *In vitro* antibody production, Mond, J.J. and Brunswick, M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.8.1-3.8.16, John Wiley and Sons, Toronto. 1994.

Mixed lymphocyte reaction (MLR) assays (which will identify, among others, proteins that generate predominantly Th1 and CTL responses) include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-

3.19; Chapter 7, Immunologic studies in Humans); Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., J. Immunol. 149:3778-3783, 1992.

Dendritic cell-dependent assays (which will identify, among others, proteins expressed by dendritic cells that activate naive T-cells) include, without limitation, those described in: Guery et al., J. Immunol. 134:536-544, 1995; Inaba et al., Journal of Experimental Medicine 173:549-559, 1991; Macatonia et al., Journal of Immunology 154:5071-5079, 1995; Porgador et al., Journal of Experimental Medicine 182:255-260, 1995; Nair et al., Journal of Virology 67:4062-4069, 1993; Huang et al., Science 264:961-965, 1994; Macatonia et al., Journal of Experimental Medicine 169:1255-1264, 1989; Bhardwaj et al., Journal of Clinical Investigation 94:797-807, 1994; and Inaba et al., Journal of Experimental Medicine 172:631-640, 1990.

Assays for lymphocyte survival/apoptosis (which will identify, among others, proteins that prevent apoptosis after superantigen induction and proteins that regulate lymphocyte homeostasis) include, without limitation, those described in: Darzynkiewicz et al., Cytometry 13:795-808, 1992; Gorczyca et al., Leukemia 7:659-670, 1993; Gorczyca et al., Cancer Research 53:1945-1951, 1993; Itoh et al., Cell 66:233-243, 1991; Zacharchuk, Journal of Immunology 145:4037-4045, 1990; Zamai et al., Cytometry 14:891-897, 1993; Gorczyca et al., International Journal of Oncology 1:639-648, 1992.

Assays for proteins that influence early steps of T-cell commitment and development include, without limitation, those described in: Antica et al., Blood 84:111-117, 1994; Fine et al., Cellular Immunology 155:111-122, 1994; Galy et al., Blood 85:2770-2778, 1995; Toki et al., Proc. Nat. Acad. Sci. USA 88:7548-7551, 1991.

Hematopoiesis Regulating Activity

A protein of the present invention may be useful in regulation of hematopoiesis and, consequently, in the treatment of myeloid or lymphoid cell deficiencies. Even marginal biological activity in support of colony forming cells or of factor-dependent cell lines indicates involvement in regulating hematopoiesis, e.g. in supporting the growth and proliferation of erythroid progenitor cells alone or in combination with other cytokines, thereby indicating utility, for example, in treating various anemias or for use in conjunction with irradiation/chemotherapy to stimulate the production of erythroid precursors and/or erythroid cells; in supporting the growth and proliferation of myeloid cells such as granulocytes and monocytes/macrophages (i.e., traditional CSF activity) useful, for

example, in conjunction with chemotherapy to prevent or treat consequent myelo-suppression; in supporting the growth and proliferation of megakaryocytes and consequently of platelets thereby allowing prevention or treatment of various platelet disorders such as thrombocytopenia, and generally for use in place of or complimentary to platelet
 5 transfusions; and/or in supporting the growth and proliferation of hematopoietic stem cells which are capable of maturing to any and all of the above-mentioned hematopoietic cells and therefore find therapeutic utility in various stem cell disorders (such as those usually treated with transplantation, including, without limitation, aplastic anemia and paroxysmal nocturnal hemoglobinuria), as well as in repopulating the stem cell compartment post
 10 irradiation/chemotherapy, either *in-vivo* or *ex-vivo* (i.e., in conjunction with bone marrow transplantation or with peripheral progenitor cell transplantation (homologous or heterologous)) as normal cells or genetically manipulated for gene therapy.

The activity of a protein of the invention may, among other means, be measured by the following methods:

15 Suitable assays for proliferation and differentiation of various hematopoietic lines are cited above.

Assays for embryonic stem cell differentiation (which will identify, among others, proteins that influence embryonic differentiation hematopoiesis) include, without limitation, those described in: Johansson et al. *Cellular Biology* 15:141-151, 1995; Keller et al.,
 20 *Molecular and Cellular Biology* 13:473-486, 1993; McClanahan et al., *Blood* 81:2903-2915, 1993.

Assays for stem cell survival and differentiation (which will identify, among others, proteins that regulate lympho-hematopoiesis) include, without limitation, those described in: Methylcellulose colony forming assays, Freshney, M.G. In *Culture of Hematopoietic*
 25 *Cells*. R.I. Freshney, et al. eds. Vol pp. 265-268, Wiley-Liss, Inc., New York, NY. 1994; Hirayama et al., *Proc. Natl. Acad. Sci. USA* 89:5907-5911, 1992; Primitive hematopoietic colony forming cells with high proliferative potential, McNiece, I.K. and Briddell, R.A. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 23-39, Wiley-Liss, Inc., New York, NY. 1994; Neben et al., *Experimental Hematology* 22:353-359, 1994;
 30 Cobblestone area forming cell assay, Ploemacher, R.E. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 1-21, Wiley-Liss, Inc., New York, NY. 1994; Long term bone marrow cultures in the presence of stromal cells, Spooncer, E., Dexter, M. and Allen, T. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 163-179, Wiley-Liss, Inc., New York, NY. 1994; Long term culture initiating cell assay, Sutherland,

H.J. In *Culture of Hematopoietic Cells*. R.I. Freshney, *et al.* eds. Vol pp. 139-162, Wiley-Liss, Inc., New York, NY. 1994.

Tissue Growth Activity

5 A protein of the present invention also may have utility in compositions used for bone, cartilage, tendon, ligament and/or nerve tissue growth or regeneration, as well as for wound healing and tissue repair and replacement, and in the treatment of burns, incisions and ulcers.

10 A protein of the present invention, which induces cartilage and/or bone growth in circumstances where bone is not normally formed, has application in the healing of bone fractures and cartilage damage or defects in humans and other animals. Such a preparation employing a protein of the invention may have prophylactic use in closed as well as open fracture reduction and also in the improved fixation of artificial joints. *De novo* bone formation induced by an osteogenic agent contributes to the repair of congenital, trauma
15 induced, or oncologic resection induced craniofacial defects, and also is useful in cosmetic plastic surgery.

A protein of this invention may also be used in the treatment of periodontal disease, and in other tooth repair processes. Such agents may provide an environment to attract bone-forming cells, stimulate growth of bone-forming cells or induce differentiation of
20 progenitors of bone-forming cells. A protein of the invention may also be useful in the treatment of osteoporosis or osteoarthritis, such as through stimulation of bone and/or cartilage repair or by blocking inflammation or processes of tissue destruction (collagenase activity, osteoclast activity, etc.) mediated by inflammatory processes.

Another category of tissue regeneration activity that may be attributable to the
25 protein of the present invention is tendon/ligament formation. A protein of the present invention, which induces tendon/ligament-like tissue or other tissue formation in circumstances where such tissue is not normally formed, has application in the healing of tendon or ligament tears, deformities and other tendon or ligament defects in humans and other animals. Such a preparation employing a tendon/ligament-like tissue inducing protein
30 may have prophylactic use in preventing damage to tendon or ligament tissue, as well as use in the improved fixation of tendon or ligament to bone or other tissues, and in repairing defects to tendon or ligament tissue. *De novo* tendon/ligament-like tissue formation induced by a composition of the present invention contributes to the repair of congenital, trauma induced, or other tendon or ligament defects of other origin, and is also useful in cosmetic

plastic surgery for attachment or repair of tendons or ligaments. The compositions of the present invention may provide an environment to attract tendon- or ligament-forming cells, stimulate growth of tendon- or ligament-forming cells, induce differentiation of progenitors of tendon- or ligament-forming cells, or induce growth of tendon/ligament cells or
5 progenitors *ex vivo* for return *in vivo* to effect tissue repair. The compositions of the invention may also be useful in the treatment of tendinitis, carpal tunnel syndrome and other tendon or ligament defects. The compositions may also include an appropriate matrix and/or sequestering agent as a carrier as is well known in the art.

The protein of the present invention may also be useful for proliferation of neural
10 cells and for regeneration of nerve and brain tissue, *i.e.* for the treatment of central and peripheral nervous system diseases and neuropathies, as well as mechanical and traumatic disorders, which involve degeneration, death or trauma to neural cells or nerve tissue. More specifically, a protein may be used in the treatment of diseases of the peripheral nervous system, such as peripheral nerve injuries, peripheral neuropathy and localized
15 neuropathies, and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager syndrome. Further conditions which may be treated in accordance with the present invention include mechanical and traumatic disorders, such as spinal cord disorders, head trauma and cerebrovascular diseases such as stroke. Peripheral neuropathies resulting from
20 chemotherapy or other medical therapies may also be treatable using a protein of the invention.

Proteins of the invention may also be useful to promote better or faster closure of non-healing wounds, including without limitation pressure ulcers, ulcers associated with vascular insufficiency, surgical and traumatic wounds, and the like.

25 It is expected that a protein of the present invention may also exhibit activity for generation or regeneration of other tissues, such as organs (including, for example, pancreas, liver, intestine, kidney, skin, endothelium), muscle (smooth, skeletal or cardiac) and vascular (including vascular endothelium) tissue, or for promoting the growth of cells comprising such tissues. Part of the desired effects may be by inhibition or modulation of
30 fibrotic scarring to allow normal tissue to regenerate. A protein of the invention may also exhibit angiogenic activity.

A protein of the present invention may also be useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, and conditions resulting from systemic cytokine damage.

A protein of the present invention may also be useful for promoting or inhibiting differentiation of tissues described above from precursor tissues or cells; or for inhibiting the growth of tissues described above.

The activity of a protein of the invention may, among other means, be measured
5 by the following methods:

Assays for tissue generation activity include, without limitation, those described in: International Patent Publication No. WO95/16035 (bone, cartilage, tendon); International Patent Publication No. WO95/05846 (nerve, neuronal); International Patent Publication No. WO91/07491 (skin, endothelium).

10 Assays for wound healing activity include, without limitation, those described in: Winter, Epidermal Wound Healing, pps. 71-112 (Maibach, HI and Rovee, DT, eds.), Year Book Medical Publishers, Inc., Chicago, as modified by Eaglstein and Mertz, J. Invest. Dermatol 71:382-84 (1978).

15 Activin/Inhibin Activity

A protein of the present invention may also exhibit activin- or inhibin-related activities. Inhibins are characterized by their ability to inhibit the release of follicle stimulating hormone (FSH), while activins are characterized by their ability to stimulate the release of follicle stimulating hormone (FSH). Thus, a protein of the present invention,
20 alone or in heterodimers with a member of the inhibin α family, may be useful as a contraceptive based on the ability of inhibins to decrease fertility in female mammals and decrease spermatogenesis in male mammals. Administration of sufficient amounts of other inhibins can induce infertility in these mammals. Alternatively, the protein of the invention, as a homodimer or as a heterodimer with other protein subunits of the inhibin- β group, may
25 be useful as a fertility inducing therapeutic, based upon the ability of activin molecules in stimulating FSH release from cells of the anterior pituitary. See, for example, United States Patent 4,798,885. A protein of the invention may also be useful for advancement of the onset of fertility in sexually immature mammals, so as to increase the lifetime reproductive performance of domestic animals such as cows, sheep and pigs.

30 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for activin/inhibin activity include, without limitation, those described in: Vale et al., Endocrinology 91:562-572, 1972; Ling et al., Nature 321:779-782, 1986; Vale

et al., Nature 321:776-779, 1986; Mason et al., Nature 318:659-663, 1985; Forage et al., Proc. Natl. Acad. Sci. USA 83:3091-3095, 1986.

Chemotactic/Chemokinetic Activity

5 A protein of the present invention may have chemotactic or chemokinetic activity (e.g., act as a chemokine) for mammalian cells, including, for example, monocytes, fibroblasts, neutrophils, T-cells, mast cells, eosinophils, epithelial and/or endothelial cells. Chemotactic and chemokinetic proteins can be used to mobilize or attract a desired cell population to a desired site of action. Chemotactic or chemokinetic proteins provide
10 particular advantages in treatment of wounds and other trauma to tissues, as well as in treatment of localized infections. For example, attraction of lymphocytes, monocytes or neutrophils to tumors or sites of infection may result in improved immune responses against the tumor or infecting agent.

A protein or peptide has chemotactic activity for a particular cell population if it can
15 stimulate, directly or indirectly, the directed orientation or movement of such cell population. Preferably, the protein or peptide has the ability to directly stimulate directed movement of cells. Whether a particular protein has chemotactic activity for a population of cells can be readily determined by employing such protein or peptide in any known assay for cell chemotaxis.

20 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for chemotactic activity (which will identify proteins that induce or prevent chemotaxis) consist of assays that measure the ability of a protein to induce the migration of cells across a membrane as well as the ability of a protein to induce the adhesion of one
25 cell population to another cell population. Suitable assays for movement and adhesion include, without limitation, those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 6.12, Measurement of alpha and beta Chemokines 6.12.1-6.12.28; Taub et al. J. Clin. Invest. 95:1370-1376, 1995; Lind et al. APMIS 103:140-146, 1995; Muller et al Eur. J. Immunol. 25: 1744-1748; Gruber et al.
30 J. of Immunol. 152:5860-5867, 1994; Johnston et al. J. of Immunol. 153: 1762-1768, 1994.

Hemostatic and Thrombolytic Activity

A protein of the invention may also exhibit hemostatic or thrombolytic activity. As a result, such a protein is expected to be useful in treatment of various coagulation disorders (including hereditary disorders, such as hemophilias) or to enhance coagulation and other hemostatic events in treating wounds resulting from trauma, surgery or other causes. A
5 protein of the invention may also be useful for dissolving or inhibiting formation of thromboses and for treatment and prevention of conditions resulting therefrom (such as, for example, infarction of cardiac and central nervous system vessels (e.g., stroke).

The activity of a protein of the invention may, among other means, be measured by the following methods:

10 Assay for hemostatic and thrombolytic activity include, without limitation, those described in: Linet et al., J. Clin. Pharmacol. 26:131-140, 1986; Burdick et al., Thrombosis Res. 45:413-419, 1987; Humphrey et al., Fibrinolysis 5:71-79 (1991); Schaub, Prostaglandins 35:467-474, 1988.

15 Receptor/Ligand Activity

A protein of the present invention may also demonstrate activity as receptors, receptor ligands or inhibitors or agonists of receptor/ligand interactions. Examples of such receptors and ligands include, without limitation, cytokine receptors and their ligands, receptor kinases and their ligands, receptor phosphatases and their ligands, receptors
20 involved in cell-cell interactions and their ligands (including without limitation, cellular adhesion molecules (such as selectins, integrins and their ligands) and receptor/ligand pairs involved in antigen presentation, antigen recognition and development of cellular and humoral immune responses). Receptors and ligands are also useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction.
25 A protein of the present invention (including, without limitation, fragments of receptors and ligands) may themselves be useful as inhibitors of receptor/ligand interactions.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for receptor-ligand activity include without limitation those
30 described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 7.28, Measurement of Cellular Adhesion under static conditions 7.28.1-7.28.22), Takai et al., Proc. Natl. Acad. Sci. USA 84:6864-6868, 1987; Bierer et al., J. Exp. Med. 168:1145-1156, 1988; Rosenstein et al., J. Exp. Med.

169:149-160 1989; Stoltenborg et al., J. Immunol. Methods 175:59-68, 1994; Stitt et al., Cell 80:661-670, 1995.

Anti-Inflammatory Activity

5 Proteins of the present invention may also exhibit anti-inflammatory activity. The anti-inflammatory activity may be achieved by providing a stimulus to cells involved in the inflammatory response, by inhibiting or promoting cell-cell interactions (such as, for example, cell adhesion), by inhibiting or promoting chemotaxis of cells involved in the inflammatory process, inhibiting or promoting cell extravasation, or by stimulating or
10 suppressing production of other factors which more directly inhibit or promote an inflammatory response. Proteins exhibiting such activities can be used to treat inflammatory conditions including chronic or acute conditions), including without limitation inflammation associated with infection (such as septic shock, sepsis or systemic inflammatory response syndrome (SIRS)), ischemia-reperfusion injury, endotoxin lethality,
15 arthritis, complement-mediated hyperacute rejection, nephritis, cytokine or chemokine-induced lung injury, inflammatory bowel disease, Crohn's disease or resulting from over production of cytokines such as TNF or IL-1. Proteins of the invention may also be useful to treat anaphylaxis and hypersensitivity to an antigenic substance or material.

Tumor Inhibition Activity

20 In addition to the activities described above for immunological treatment or prevention of tumors, a protein of the invention may exhibit other anti-tumor activities. A protein may inhibit tumor growth directly or indirectly (such as, for example, via ADCC). A protein may exhibit its tumor inhibitory activity by acting on tumor tissue or tumor
25 precursor tissue, by inhibiting formation of tissues necessary to support tumor growth (such as, for example, by inhibiting angiogenesis), by causing production of other factors, agents or cell types which inhibit tumor growth, or by suppressing, eliminating or inhibiting factors, agents or cell types which promote tumor growth.

30

Other Activities

A protein of the invention may also exhibit one or more of the following additional activities or effects: inhibiting the growth, infection or function of, or killing, infectious agents, including, without limitation, bacteria, viruses, fungi and other parasites; effecting

(suppressing or enhancing) bodily characteristics, including, without limitation, height, weight, hair color, eye color, skin, fat to lean ratio or other tissue pigmentation, or organ or body part size or shape (such as, for example, breast augmentation or diminution, change in bone form or shape); effecting biorhythms or circadian cycles or rhythms; effecting the

5 fertility of male or female subjects; effecting the metabolism, catabolism, anabolism, processing, utilization, storage or elimination of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors or other nutritional factors or component(s); effecting behavioral characteristics, including, without limitation, appetite, libido, stress, cognition (including cognitive disorders), depression (including depressive disorders) and violent

10 behaviors; providing analgesic effects or other pain reducing effects; promoting differentiation and growth of embryonic stem cells in lineages other than hematopoietic lineages; hormonal or endocrine activity; in the case of enzymes, correcting deficiencies of the enzyme and treating deficiency-related diseases; treatment of hyperproliferative disorders (such as, for example, psoriasis); immunoglobulin-like activity (such as, for

15 example, the ability to bind antigens or complement); and the ability to act as an antigen in a vaccine composition to raise an immune response against such protein or another material or entity which is cross-reactive with such protein.

20

ADMINISTRATION AND DOSING

A protein of the present invention (from whatever source derived, including without limitation from recombinant and non-recombinant sources) may be used in a pharmaceutical composition when combined with a pharmaceutically acceptable carrier. Such a composition may also contain (in addition to protein and a carrier) diluents, fillers, salts, buffers, stabilizers, solubilizers, and other materials well known in the art. The term "pharmaceutically acceptable" means a non-toxic material that does not interfere with the effectiveness of the biological activity of the active ingredient(s). The characteristics of the carrier will depend on the route of administration. The pharmaceutical composition of the invention may also contain cytokines, lymphokines, or other hematopoietic factors such as M-CSF, GM-CSF, TNF, IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-13, IL-14, IL-15, IFN, TNF0, TNF1, TNF2, G-CSF, Meg-CSF, thrombopoietin, stem cell factor, and erythropoietin. The pharmaceutical composition may further contain other agents which either enhance the activity of the protein or complement its activity or use in treatment. Such additional factors and/or agents may be included in the pharmaceutical composition to produce a synergistic effect with protein of the invention, or to minimize side effects. Conversely, protein of the present invention may be included in formulations of the particular cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent to minimize side effects of the cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent.

A protein of the present invention may be active in multimers (e.g., heterodimers or homodimers) or complexes with itself or other proteins. As a result, pharmaceutical compositions of the invention may comprise a protein of the invention in such multimeric or complexed form.

The pharmaceutical composition of the invention may be in the form of a complex of the protein(s) of present invention along with protein or peptide antigens. The protein and/or peptide antigen will deliver a stimulatory signal to both B and T lymphocytes. B lymphocytes will respond to antigen through their surface immunoglobulin receptor. T lymphocytes will respond to antigen through the T cell receptor (TCR) following presentation of the antigen by MHC proteins. MHC and structurally related proteins including those encoded by class I and class II MHC genes on host cells will serve to present the peptide antigen(s) to T lymphocytes. The antigen components could also be supplied as purified MHC-peptide complexes alone or with co-stimulatory molecules that

can directly signal T cells. Alternatively antibodies able to bind surface immunoglobulin and other molecules on B cells as well as antibodies able to bind the TCR and other molecules on T cells can be combined with the pharmaceutical composition of the invention.

5 The pharmaceutical composition of the invention may be in the form of a liposome in which protein of the present invention is combined, in addition to other pharmaceutically acceptable carriers, with amphipathic agents such as lipids which exist in aggregated form as micelles, insoluble monolayers, liquid crystals, or lamellar layers in aqueous solution. Suitable lipids for liposomal formulation include, without limitation, monoglycerides, diglycerides, sulfatides, lysolecithin, phospholipids, saponin, bile acids, and the like. Preparation of such liposomal formulations is within the level of skill in the art, as disclosed, for example, in U.S. Patent No. 4,235,871; U.S. Patent No. 4,501,728; U.S. Patent No. 4,837,028; and U.S. Patent No. 4,737,323, all of which are incorporated herein by reference.

15 As used herein, the term "therapeutically effective amount" means the total amount of each active component of the pharmaceutical composition or method that is sufficient to show a meaningful patient benefit, i.e., treatment, healing, prevention or amelioration of the relevant medical condition, or an increase in rate of treatment, healing, prevention or amelioration of such conditions. When applied to an individual active ingredient, administered alone, the term refers to that ingredient alone. When applied to a combination, the term refers to combined amounts of the active ingredients that result in the therapeutic effect, whether administered in combination, serially or simultaneously.

In practicing the method of treatment or use of the present invention, a therapeutically effective amount of protein of the present invention is administered to a mammal having a condition to be treated. Protein of the present invention may be administered in accordance with the method of the invention either alone or in combination with other therapies such as treatments employing cytokines, lymphokines or other hematopoietic factors. When co-administered with one or more cytokines, lymphokines or other hematopoietic factors, protein of the present invention may be administered either simultaneously with the cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors, or sequentially. If administered sequentially, the attending physician will decide on the appropriate sequence of administering protein of the present invention in combination with cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors.

Administration of protein of the present invention used in the pharmaceutical composition or to practice the method of the present invention can be carried out in a variety of conventional ways, such as oral ingestion, inhalation, topical application or cutaneous, subcutaneous, intraperitoneal, parenteral or intravenous injection. Intravenous

5 administration to the patient is preferred.

When a therapeutically effective amount of protein of the present invention is administered orally, protein of the present invention will be in the form of a tablet, capsule, powder, solution or elixir. When administered in tablet form, the pharmaceutical composition of the invention may additionally contain a solid carrier such as a gelatin or an
10 adjuvant. The tablet, capsule, and powder contain from about 5 to 95% protein of the present invention, and preferably from about 25 to 90% protein of the present invention. When administered in liquid form, a liquid carrier such as water, petroleum, oils of animal or plant origin such as peanut oil, mineral oil, soybean oil, or sesame oil, or synthetic oils may be added. The liquid form of the pharmaceutical composition may further contain
15 physiological saline solution, dextrose or other saccharide solution, or glycols such as ethylene glycol, propylene glycol or polyethylene glycol. When administered in liquid form, the pharmaceutical composition contains from about 0.5 to 90% by weight of protein of the present invention, and preferably from about 1 to 50% protein of the present invention.

20 When a therapeutically effective amount of protein of the present invention is administered by intravenous, cutaneous or subcutaneous injection, protein of the present invention will be in the form of a pyrogen-free, parenterally acceptable aqueous solution. The preparation of such parenterally acceptable protein solutions, having due regard to pH, isotonicity, stability, and the like, is within the skill in the art. A preferred pharmaceutical
25 composition for intravenous, cutaneous, or subcutaneous injection should contain, in addition to protein of the present invention, an isotonic vehicle such as Sodium Chloride Injection, Ringer's Injection, Dextrose Injection, Dextrose and Sodium Chloride Injection, Lactated Ringer's Injection, or other vehicle as known in the art. The pharmaceutical composition of the present invention may also contain stabilizers, preservatives, buffers,
30 antioxidants, or other additives known to those of skill in the art.

The amount of protein of the present invention in the pharmaceutical composition of the present invention will depend upon the nature and severity of the condition being treated, and on the nature of prior treatments which the patient has undergone. Ultimately, the attending physician will decide the amount of protein of the present invention with

which to treat each individual patient. Initially, the attending physician will administer low doses of protein of the present invention and observe the patient's response. Larger doses of protein of the present invention may be administered until the optimal therapeutic effect is obtained for the patient, and at that point the dosage is not increased further. It is contemplated that the various pharmaceutical compositions used to practice the method of the present invention should contain about 0.01 μ g to about 100 mg (preferably about 0.1 mg to about 10 mg, more preferably about 0.1 μ g to about 1 mg) of protein of the present invention per kg body weight.

The duration of intravenous therapy using the pharmaceutical composition of the present invention will vary, depending on the severity of the disease being treated and the condition and potential idiosyncratic response of each individual patient. It is contemplated that the duration of each application of the protein of the present invention will be in the range of 12 to 24 hours of continuous intravenous administration. Ultimately the attending physician will decide on the appropriate duration of intravenous therapy using the pharmaceutical composition of the present invention.

Protein of the invention may also be used to immunize animals to obtain polyclonal and monoclonal antibodies which specifically react with the protein. Such antibodies may be obtained using either the entire protein or fragments thereof as an immunogen. The peptide immunogens additionally may contain a cysteine residue at the carboxyl terminus, and are conjugated to a hapten such as keyhole limpet hemocyanin (KLH). Methods for synthesizing such peptides are known in the art, for example, as in R.P. Merrifield, J. Amer.Chem.Soc. 85, 2149-2154 (1963); J.L. Krstenansky, *et al.*, FEBS Lett. 211, 10 (1987). Monoclonal antibodies binding to the protein of the invention may be useful diagnostic agents for the immunodetection of the protein. Neutralizing monoclonal antibodies binding to the protein may also be useful therapeutics for both conditions associated with the protein and also in the treatment of some forms of cancer where abnormal expression of the protein is involved. In the case of cancerous cells or leukemic cells, neutralizing monoclonal antibodies against the protein may be useful in detecting and preventing the metastatic spread of the cancerous cells, which may be mediated by the protein.

For compositions of the present invention which are useful for bone, cartilage, tendon or ligament regeneration, the therapeutic method includes administering the composition topically, systematically, or locally as an implant or device. When administered, the therapeutic composition for use in this invention is, of course, in a

pyrogen-free, physiologically acceptable form. Further, the composition may desirably be encapsulated or injected in a viscous form for delivery to the site of bone, cartilage or tissue damage. Topical administration may be suitable for wound healing and tissue repair. Therapeutically useful agents other than a protein of the invention which may also
5 optionally be included in the composition as described above, may alternatively or additionally, be administered simultaneously or sequentially with the composition in the methods of the invention. Preferably for bone and/or cartilage formation, the composition would include a matrix capable of delivering the protein-containing composition to the site of bone and/or cartilage damage, providing a structure for the developing bone and
10 cartilage and optimally capable of being resorbed into the body. Such matrices may be formed of materials presently in use for other implanted medical applications.

The choice of matrix material is based on biocompatibility, biodegradability, mechanical properties, cosmetic appearance and interface properties. The particular application of the compositions will define the appropriate formulation. Potential matrices
15 for the compositions may be biodegradable and chemically defined calcium sulfate, tricalciumphosphate, hydroxyapatite, polylactic acid, polyglycolic acid and polyanhydrides. Other potential materials are biodegradable and biologically well-defined, such as bone or dermal collagen. Further matrices are comprised of pure proteins or extracellular matrix components. Other potential matrices are nonbiodegradable and chemically defined, such as
20 as sintered hydroxapatite, bioglass, aluminates, or other ceramics. Matrices may be comprised of combinations of any of the above mentioned types of material, such as polylactic acid and hydroxyapatite or collagen and tricalciumphosphate. The bioceramics may be altered in composition, such as in calcium-aluminate-phosphate and processing to alter pore size, particle size, particle shape, and biodegradability.

25 Presently preferred is a 50:50 (mole weight) copolymer of lactic acid and glycolic acid in the form of porous particles having diameters ranging from 150 to 800 microns. In some applications, it will be useful to utilize a sequestering agent, such as carboxymethyl cellulose or autologous blood clot, to prevent the protein compositions from disassociating from the matrix.

30 A preferred family of sequestering agents is cellulosic materials such as alkylcelluloses (including hydroxyalkylcelluloses), including methylcellulose, ethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropyl-methylcellulose, and carboxymethylcellulose, the most preferred being cationic salts of carboxymethylcellulose (CMC). Other preferred sequestering agents include hyaluronic acid, sodium alginate,

poly(ethylene glycol), polyoxyethylene oxide, carboxyvinyl polymer and poly(vinyl alcohol). The amount of sequestering agent useful herein is 0.5-20 wt%, preferably 1-10 wt% based on total formulation weight, which represents the amount necessary to prevent desorption of the protein from the polymer matrix and to provide appropriate handling of the composition, yet not so much that the progenitor cells are prevented from infiltrating the matrix, thereby providing the protein the opportunity to assist the osteogenic activity of the progenitor cells.

In further compositions, proteins of the invention may be combined with other agents beneficial to the treatment of the bone and/or cartilage defect, wound, or tissue in question. These agents include various growth factors such as epidermal growth factor (EGF), platelet derived growth factor (PDGF), transforming growth factors (TGF- α and TGF- β), and insulin-like growth factor (IGF).

The therapeutic compositions are also presently valuable for veterinary applications. Particularly domestic animals and thoroughbred horses, in addition to humans, are desired patients for such treatment with proteins of the present invention.

The dosage regimen of a protein-containing pharmaceutical composition to be used in tissue regeneration will be determined by the attending physician considering various factors which modify the action of the proteins, e.g., amount of tissue weight desired to be formed, the site of damage, the condition of the damaged tissue, the size of a wound, type of damaged tissue (e.g., bone), the patient's age, sex, and diet, the severity of any infection, time of administration and other clinical factors. The dosage may vary with the type of matrix used in the reconstitution and with inclusion of other proteins in the pharmaceutical composition. For example, the addition of other known growth factors, such as IGF I (insulin like growth factor I), to the final composition, may also effect the dosage. Progress can be monitored by periodic assessment of tissue/bone growth and/or repair, for example, X-rays, histomorphometric determinations and tetracycline labeling.

Polynucleotides of the present invention can also be used for gene therapy. Such polynucleotides can be introduced either *in vivo* or *ex vivo* into cells for expression in a mammalian subject. Polynucleotides of the invention may also be administered by other known methods for introduction of nucleic acid into a cell or organism (including, without limitation, in the form of viral vectors or naked DNA).

Cells may also be cultured *ex vivo* in the presence of proteins of the present invention in order to proliferate or to produce a desired effect on or activity in such cells. Treated cells can then be introduced *in vivo* for therapeutic purposes.

Patent and literature references cited herein are incorporated by reference as if fully set forth.

Table 3

Sel.	Species	Tissue	Cell Type
AA	Human	Kidney	19-23wks., M/F pool of 5
AB	Human	Fetal Lung	Fetal Lung
AC	Human	Placenta	26yrs., 1 specimen
AD	Murine	Embryo	Fetal ES cells
AE	Murine	Spleen	Adult spleen
AF	Murine	Fetal Brain	Fetal Brain
AG	Murine	Fetal Brain	Fetal Brain
AH	Murine	Fetal Thymus	Fetal Thymus
AI	Human	Blood	Adult PBMC/TH1or2
AJ	Human	Testes	10-61yrs., pool of 11
AK	Human	Kidney	19-23wks., M/F pool of 5
AL	Human	Neural	Adult Glioblastoma line TG-1
AM	Human	Kidney	19-23wks., M/F pool of 5
AN	Murine	Bone Marrow	Adult Stromal cell line FCM-4
AO	Murine	Thymus	Adult Subtr. Adult Thymus
AP	Human	Placenta	26yrs., 1 specimen
AQ	Human	Ovary	PA-1 Teratocarcinoma
AR	Human	Retina	16-75yrs., pool of 76
AS	Human	Brain	19-23wks., M/F pool of 5
AT	Human	Blood	Adult lymphocytes+dend. cells
AU	Human	Testes	10-61yrs., pool of 11
AV	Murine	Spleen	Adult spleen
AW	Human	Ovary	PA-1 Teratocarcinoma
AX	Human	Testes	10-61yrs., pool of 11
AY	Human	Retina	16-75yrs., pool of 76
AZ	Human	Colon	Caco-2 Adenocarcinoma
B	Human	Blood	PeripheralBloodMononuclearCell
BA	Human	Placenta	26yrs., 1 specimen
BB	Human	Blood	Adult PBMC/TH1or2
BC	Murine	Embryo	Fetal ES cells
BD	Human	Kidney	19-23wks., M/F pool of 5
BE	Human	Blood	Adult PBMC/TH1or2
BF	Human	Brain	19-23wks., M/F pool of 5
BG	Human	Brain	N/A
BH	Human	Ovary	PA-1 Teratocarcinoma
BI	Human	Kidney	19-23wks., M/F pool of 5
BJ	Human	Ovary	PA-1 Teratocarcinoma
BK	Human	Retina	16-75yrs., pool of 76
BL	Human	Testes	10-61yrs., pool of 11
BM	Human	Muscle	N/A
BN	Human	Placenta	26yrs., 1 specimen
BO	Human	Retina	16-75yrs., pool of 76
BP	Human	Kidney	19-23wks., M/F pool of 5
BQ	Human	Colon	Caco-2 Adenocarcinoma Caco2

BR	Human	Kidney	19-23wks., M/F pool of 5
BS	Human	Pituitary	Adult Pituitary
BT	Human	Blood	Adult PBMC
BU	Human	Placenta	26yrs., 1 specimen
BV	Human	Brain	N/A
BW	Human	Blood	Adult PBMC
BX	Human	Ovary	PA-1 Teratocarcinoma
BY	Human	Blood	Adult PBMC/TH1 or 2
BZ	Human	Kidney	19-23wks., M/F pool of 5
C	Human	Blood	Peripheral Blood Mononuclear Cell
CA	Murine	Embryo	Fetal ES cell embryoid bodies
CB	Human	Brain	19-23wks., M/F pool of 5
CC	Human	Brain	N/A
CD	Human	Brain	19-23wks., M/F pool of 5
CE	Human	Blood	Adult lymphocytes+dend. cells
CF	Human	Placenta	26yrs., 1 specimen
CG	Human	Testes	10-61yrs., pool of 11
CH	Human	Kidney	19-23wks., M/F pool of 5
CI	Human	Brain	N/A
CJ	Human	Brain	19-23wks., M/F pool of 5
CK	Human	Testes	10-61yrs., pool of 11
CL	Human	Retina	16-75yrs., pool of 76
CM	Human	Adult Lung	Adult Lung
CN	Human	Brain	19-23wks., M/F pool of 5
CO	Human	Brain	N/A
CP	Human	Salivary Gland	N/A
CQ	Human	Heart	13-73yrs., pool of 3
CR	Human	Testes	10-61yrs., pool of 11
CS	Human	Brain	19-23wks., M/F pool of 5
CT	Human	Brain	N/A
CU	Human	Pineal Gland	N/A
CV	Human	Mammary	Adult Human Mammary
CW	Human	Brain	19-23wks., M/F pool of 5
CY	Human	Pineal Gland	N/A
CZ	Human	Testes	10-61yrs., pool of 11
D	Human	Blood	Peripheral Blood Mononuclear Cell
DA	Human	Placenta	26yrs., 1 specimen
DB	Human	Prostate	Adult Prostate
DC	Human	Pineal Gland	Adult Pineal Gland
DD	Human	Testes	10-61yrs., pool of 11
DE	Human	Testes	Adult NCCIT TeratoCA
DF	Human	Brain	N/A
DG	Human	Placenta	26yrs., 1 specimen
DH	Human	Brain	19-23wks., M/F pool of 5
DI	Human	Testes	10-61yrs., pool of 11
DJ	Human	Placenta	26yrs., 1 specimen
DK	Human	Fetal Kidney2	Fetal Kidney

DL	Human	Brain	N/A
DM	Human	Brain	N/A
DN	Human	Brain	19-23wks., M/F pool of 5
DO	Human	Testes	10-61yrs., pool of 11
DP	Murine	Embryo	Fetal ES cell embryoid bodies
DQ	Human	Placenta	26yrs., 1 specimen
DR	Human	SalivaryGland	N/A
DT	Human	Brain	N/A
DU	Human	Brain	19-23wks., M/F pool of 5
DV	Human	Pineal Gland	Adult Pineal Gland
DW	Human	Brain	N/A
DX	Human	Testes	10-61yrs., pool of 11
DY	Human	Brain	N/A
DZ	Human	Testes	Adult NCCIT TeratoCA
E	Human	Blood	PeripheralBloodMononuclearCell
EA	Human	Brain	19-23wks., M/F pool of 5
EB	Human	Melanoma	Adult Melanoma
EC	Human	Brain	N/A
ED	Human	Placenta	26yrs., 1 specimen
EE	Human	Testes	10-61yrs., pool of 11
EF	Human	Liver	Adult Liver
EG	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
EH	Human	Blood	PeripheralBloodMononuclearCell
EI	Human	Brain	19-23wks., M/F pool of 5
EJ	Human	Placenta	26yrs., 1 specimen
EK	Human	Brain	19-23wks., M/F pool of 5
EL	Human	Testes	10-61yrs., pool of 11
EM	Human	Fetal Kidney2	Fetal Kidney
EN	Human	Brain	19-23wks., M/F pool of 5
EO	Human	Adrenal Gland	Adult Adrenal Gland
EP	Human	Placenta	26yrs., 1 specimen
EQ	Human	Testes	10-61yrs., pool of 11
ER	Human	Brain	19-23wks., M/F pool of 5
ES	Human	Placenta	26yrs., 1 specimen
ET	Human	Testes	10-61yrs., pool of 11
EU	Human	Kidney	Adult Kidney
EV	Human	Stomach	Adult Stomach
EW	Human	Placenta	26yrs., 1 specimen
EX	Human	Testes	10-61yrs., pool of 11
EY	Human	Brain	19-23wks., M/F pool of 5
EZ	Human	Fetal Kidney2	Fetal Kidney
FA	Human	Brain	19-23wks., M/F pool of 5
FB	Human	Placenta	26yrs., 1 specimen
FC	Human	Testes	10-61yrs., pool of 11
FD	Human	SalivaryGland	N/A
FE	Human	Brain	N/A
FF	Human	Testes	Adult NCCIT TeratoCA

FG	Human	Brain	N/A
FH	Human	Brain	19-23wks., M/F pool of 5
FI	Human	Small Intest	Adult Small Intestine
FJ	Human	Lung CA	Adult Lung CA
FK	Human	Kidney	Adult Kidney
FM	Human	Brain	N/A
FN	Human	Brain	19-23wks., M/F pool of 5
FO	Human	Brain	N/A
FP	Human	Placenta	26yrs., 1 specimen
FQ	Human	Testes	10-61yrs., pool of 11
FR	Human	Placenta	26yrs., 1 specimen
FS	Human	Testes	10-61yrs., pool of 11
FT	Chicken	Fetal Lung	Fetal Lung
FU	Chicken	Limb Bud	Fetal St. 23 Limb Bud
FV	Human	Testes	Adult NCCIT TeratoCA
FW	Human	Testes	Adult NCCIT TeratoCA
FX	Human	Brain	19-23wks., M/F pool of 5
FY	Human	Placenta	26yrs., 1 specimen
FZ	Human	Placenta	26yrs., 1 specimen
G	Human	Blood	PeripheralBloodMononuclearCell
GA	Human	Testes	10-61yrs., pool of 11
GB	Human	Placenta	26yrs., 1 specimen
GC	Human	Testes	10-61yrs., pool of 11
GD	Human	Placenta	26yrs., 1 specimen
GE	Human	Brain	N/A
GF	Human	Brain	19-23wks., M/F pool of 5
GG	Human	Fetal Kidney2	Fetal Kidney
GH	Human	Placenta	26yrs., 1 specimen
GI	Human	Retinoblastoma	Adult Retinoblastoma Y79
GJ	Murine	Spleen	Adult Spleen
GK	Human	Fetal Kidney2	Fetal Kidney
GL	Murine	Lymph Node	Adult Lymph Node
GM	Human	Uterus	N/A
GN	Human	Blood	PeripheralBloodMononuclearCell
GO	Human	Adrenal Gland	Adult Adrenal Gland
GP	Human	Ovary	PA-1 Teratocarcinoma
GQ	Human	Pineal Gland	N/A
GR	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
GS	Human	Retina	16-75yrs., pool of 76
GT	Human	Brain	N/A
GU	Human	Fetal Kidney2	Fetal Kidney
GV	Rat	Retina	Newborn Retina
GW	Chicken	Limb Bud	Fetal St.26 Limb Bud
GX	Human	Brain	N/A
GY	Human	Testes	10-61yrs., pool of 11
GZ	Human	Brain	19-23wks., M/F pool of 5
H	Human	Blood	PeripheralBloodMononuclearCell

HA	Human	Testes	Adult NCCIT TeratoCA
HB	Human	Fetal Kidney2	Fetal Kidney
HC	Human	Brain	19-23wks., M/F pool of 5
HD	Human	Brain	N/A
HE	Human	Testes	10-61yrs., pool of 11
HF	Human	Brain	19-23wks., M/F pool of 5
HG	Human	Fetal Kidney2	Fetal Kidney
HH	Human	Brain	N/A
HI	Human	Testes	10-61yrs., pool of 11
HJ	Human	Brain	N/A
HK	Human	Brain	19-23wks., M/F pool of 5
HL	Human	Fetal Kidney2	Fetal Kidney
HM	Human	Testes	Adult NCCIT TeratoCA
HN	Human	Fetal Kidney2	Fetal Kidney
HO	Human	Brain	N/A
HP	Human	Brain	19-23wks., M/F pool of 5
HQ	Human	Testes	10-61yrs., pool of 11
HR	Human	Brain	N/A
HS	Human	Brain	N/A
HT	Human	Brain	19-23wks., M/F pool of 5
HU	Human	Fetal Kidney2	Fetal Kidney
HV	Human	Testes	10-61yrs., pool of 11
HW	Human	Brain	N/A
HX	Human	Brain Hippoca	Adult Brain Hippocampus
HY	Human	Trachea	Adult Trachea
HZ	Human	Brain Thalamus	Adult Brain Thalamus
I	Human	Blood	PeripheralBloodMononuclearCell
IA	Human	Thyroid	Adult Thyroid
IB	Human	Embryonal CA	Fetal NT2-D1
IC	Human	WER1-Rb1 line	Adult Retinoblastoma
ID	Human	Muscle	N/A
IE	Human	Brain	19-23wks., M/F pool of 5
IF	Human	Uterus	N/A
IG	Human	Testes	10-61yrs., pool of 11
IH	Human	Muscle	N/A
II	Human	Brain	N/A
IJ	Human	Blood	PeripheralBloodMononuclearCell
IK	Human	Retinoblastoma	Adult Retinoblastoma Y79
IL	Human	Retina	16-75yrs., pool of 76
IM	Human	Various	Various
IN	Human	Prostate	Adult Prostate
IO	Human	Brain	19-23wks., M/F pool of 5
IP	Human	Fetal Kidney2	Fetal Kidney
IQ	Human	Prostate	Adult Prostate
IR	Human	Brain Hippoca	Adult Brain Hippocampus
IS	Human	Trachea	Adult Trachea
IT	Human	Brain Thalamu	Adult Brain Thalamus

SEQUENCE LISTING

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 - (C) CITY: Cambridge
 - (D) STATE: Massachusetts
 - (E) COUNTRY: U.S.A
 - (F) ZIP: 02140
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy Disk
 - (B) COMPUTER: IBM PC Compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER:
 - (B) FILING DATE:
 - (C) CLASSIFICATION:
- (vii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: Brown, Scott A.
 - (B) REGISTRATION NUMBER: 32,724
- (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: (617) 498-8224
 - (B) TELEFAX: (617) 876-5851

(2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

```

GGAGATGTTG AGGTGGCTGC TGACCTTGGG TCTCATCTCC TTGATTTTCT TTATCTTCTT      60
CATTGCCGTC CTCTCTAGGC TGTCTTTGGC GAGGAGGGCC CCTGCGGAAT CGTGGTCTAT      120
ATCCCCGATA CATATTCTGC CTCCTGGTGC TACCTTGTTT TCCTGCACCC TGGTTGTCAG      180
CACCCCTCCAT CACTTCTCCC TGCACAGGAG GGTGGAATA CTGTGGTCTGA CGCCCATAGG      240

```

GTCTCCGCAT GTAGTAAGGT GGGAACTTC GCCTGCGGTA GGGCCGGCGT TGTGGGCCT 300
 GGCTTCGGG AGCACTCTCC GATCCCTCGT TCTTTTCCCC ACTCTCACTA TTCTGGTAAT 360
 TTTGCTGGTA ATTGCGTGA GGAGAACAGG TAGACTCGAG 400

(2) INFORMATION FOR SEQ ID NO:2:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 165 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

GAATTAGTTG CCAGCACTTT AAAAATTGGT ATAGTTCACA TAAATATTCT GAATTCAGGC 60
 TTTTGGAAAA GTTGTGGACC CAAGAATACT AGGCCCGCAT TTTCTTACGT CAACATTCTT 120
 TCCAGGATGA TGAATGGACT GTTCTCTTTG GCCCCCTATC TCGAG 165

(2) INFORMATION FOR SEQ ID NO:3:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 299 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

GAATTCTAGA CCTTCCTCTC CTACTCCCTT CCTTAGGCTC CTGAATCGT TTGCTCCTAA 60
 ATCTTGTTAA TTCTTTTCT CTGGATTTTG GTTTCTTTTG GCTTTCCTT GCCTTCCCCT 120
 TTCTCTGTCT CCAACACTCT TTCCCCATGT CTTTCTGGCT GTCTCTATGT TCCTCTTCTC 180
 TTATCCTCAA CTTTCTGTCC ATTCGGGCCT CCTCCCCACC TCCCACGCC CAGCCCCTCC 240
 CTCCTGGTC TCCTTTTGA TATGCCAAAC CAATTTTGGG TCGAGTGCAT TCCTCGAG 299

(2) INFORMATION FOR SEQ ID NO:4:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 241 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

GCGATTGAAT TCTAGACCTG CCTGGATTGC CTTCTGTTGT GGTAGACAAA TCACCATTAA 60
 ATGACTAAGT TTCACTGTTT TATGTGTTAA TGATCCTTAA TAACAAAAAG TTTTAAAGTC 120
 TTAATTTCTG AAGATTATGT AAAGGTTAAG AAAGAAATTT TAAGTGAAAA TGATAAAACC 180
 AAGCAAATGT TTATTAGTTC AATTGTTTTT CTTTTATCT TGCAGCAACG CACATCTCGA 240
 G 241

(2) INFORMATION FOR SEQ ID NO:5:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

```
GAATTCGGCC TTCATGGCCT AGGAAATGAC TTTATTGTGG TTGAATTAGT TAAAGGGTAC      60
TTACATTACG TGTTTGATTT GGGAAATGGT GCTAACCTCA TCAAAGGAAG CTCAAATAAA      120
CCTCTCAATG ACAATCAGTG GCACAACCTG ATGATATCAA GGGACACCAG CAACCTCCAC      180
ACTGTAAAGA TTGACACAAA AATCACAACG CAAATCACCG CCGGAGCCAG GAACCTAGAC      240
CTCAAGAGTG ACTTATATAT AGGAGGAGTA GCTAAAGAAA CATACAAATC CTTACCAAAA      300
CTTGATCATG CCAAAGAAGG CTTTCAAGGC TGCCTGGCAT CAGTTGATTT AAATGGACGG      360
CTCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

```
GAATTCGGCC TTCATGGCCT ATAAAATTTA AAAATGCTAA GGATCTGGCC CCACAGGCCCC      60
CAAAGCTTTC ACAGAGCTCC TCTTAGACAT GAAGATGCCC ATTGGCCTCC TAGGTCCCAG      120
GAGGTGTGGG CAGGACTGCC CTTCTCCGT TCTCATGCG GGGCTCCTGA AGGGGGTATC      180
TGAAAGTATG TAAATCTGAT GGGAGGTCTG ATCCTCCTTT TGCTAGCCCC TGAACCTGT      240
GGTGGAGTCT GGCTGATGGC CAGGGCCATG TCCTAGAGGG GACTCCCCTG CAGGAGGCGG      300
GCTCTAAAGG GAGTGGTGTC CCTTTAGGCC AGGGTTTACA GTCGGGGTGG TCTGGAGACT      360
GCAGGACTCA GGGCCTGGGG GTGGCATCAG TCTGGCCAGG CCCTGCGTCA CTTGCACCCA      420
CTGTCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

```
GGGTGGCTCA TGCCTGTAAT CCCGGCACTT GGGTAGGCCA GGGCAGCAGG ATCGCTTGAG      60
CCCGGGAGTT CGAGACAGCC TGGGCAACAT GGTGAGACCC TGTCTCCATA AAATTTTATA      120
AAAAATTGCC AGGTGTGGTC GTGTGTGCCT GTGAGGCTGA GGTGGGAGGC TCGCTTGAGC      180
CCAGGGGTCA AGGCTGCAGT GAGCCATGAC TGCACGCCAC TGCACTCCAG CGTGGGTGAC      240
AGAGTGAGAT ACTGTATAAA AAAAAAAGC TAAACAAAA CAAGAAGTAT TATCTTAAGC      300
ATGTTATTTA GAAATATGGA GATAAATAAA AATAACTGAA AGTAGGTCGT TGCTTCTGAG      360
GAGAGAAATT GGGAGTTGGC AAGTCTCGA G
```

(2) INFORMATION FOR SEQ ID NO:8:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

```

GCTTTTGGAG CTGCTAAAAT GCCGGATTAC CTCGGTGCCG ATCAGCGGAA GACCAAAGAG      60
GATGAGAAGG ACGACAAGCC CATCCGAGCT CTGGATGAGG GGGATATTGC CTGTTGAAA      120
ACTTATGGTC AGAGCACTTA CTCTAGGCAG ATCAAGCAAG TTGAAGATGA CATTCAGCAA      180
CTTCTCAAGA AAATTAATGA GCTCACTGGT ATTAAGAAT CTGACACTGG CCTGGCCCCA      240
CCAGCACTCT GGGATTGGC TGCAGATAAG CAGACACTCC AGAGTGAACA GCCTTTACAG      300
GTTGCCAGGT GTACAAAGAT AATCAATGCT GATTCGGAGG ACCCACTCGA G      351

```

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

```

GTGATGTGTC ACCCCAAGTG CTCCACGTGC TTGCCAGCCA CCTGCGGCTT GCCTGCTGAA      60
TATGCCACAC ACTTCACCGA GGCCTTCTGC CGTGACAAAA TGAATCCTCC AGGTCTCCAG      120
ACCAAGGAGC CCAGCAGCAG CTTGCACCTG GAAGGGTGGA TGAAGGTGCC CAGGAATAAC      180
AAACGAGGAC AGCAAGGCTG GGACAGGAAG TACATTGTCC TGGAGGGATC AAAAGTCCTC      240
ATTTATGACA ATGAAGCCAG AGAAGCTGGA CAGAGGCCCG TGAAGAATT TGAGCTGTGC      300
CTTCCCGACG GGGATGTATC TATTCATGGT GCCGTTGGTG CTTCCAAACT CGAG      354

```

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

```

GAATTCGGCC TTCATGGNCT AGGAGGAGGA AGAGGAGTAC GAGGATGACG AGGGAGGAGG      60
GGGAAGACGA GGAGGAGGAG GAGGCTGCCG CAGAGGCTGC CGCGGGGGCC AAACATGACG      120
ATGCCCCAGC CGAGATGCCT GATGACGCCA AGAAGTAAGG GGGGCAGAGA TGGATGAAGA      180
GAAAGCCAC GAAGAAAAAA GCCTGGTTT GTTTTCCCA GAATATCGAT GGAATAAAA      240
AGGCTCAGGT TTTTGACCAA AATACAATGT GAATTTATTC TGACATTCTT AAAATAGATT      300
AAATTAAGC AATTAGATCC TGGCCAGCTC GATTCAAATT TGACTTTTTC TTTGAACATA      360
ATAAATATAT CAAAAGGTGT TAAAGAAAAC TGAATTAAAC CAAAATTAT GTTTTCATGG      420
TCTCTCTCG AG      432

```

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 687 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

```

CTATTTTACA TGCCACCAG CATTGTATGG GGCTTCTCAC TTGTCCACAT GCTTGCCTGT      60
GTCATATTTG ACTTAAAGCT TATTTTGACG GGAAACCAAT TTGTCCTTTT TTTGGAAAGG      120
GATGGCACCA CAGATGTGAC GCGGACAAATG CATTTTGGGA CCCCTACAGC CTACGAGAAG      180
GAATGCTTCA CATATGTCTT CAAGGGCCAC ATAGCTGTGA GTGCAGCCGT TTTCCCGACT      240
GGAACCAAAG GTCACCTTCT TGACTCCTTT GCCCGTTCAG CTTTATGGGA TTCAGGCCTA      300
GATTACTTGC ACGGGACTGG ACATGGTGTT GGGTCTTTT TGAATGTCCA TGAAGGTCCT      360
TGCGGCATCA GTTACAAA.C ATTCTCTGAT GAGCCCTTGG AGGCAGGCAT GATTGTCACT      420
GATGAGCCCC GGTACTATGA AGATGGGGCT TTTGGAATTC GCATTGAGAA TGTGTCTCTT      480
GTGGTTCTCTG TGAAGACCAA GTATAATTTT AATAACCGGG GAAGCCTGAC CTTTGAACCT      540
CTAACATTGG TTCCAATTCA GACCAAAATG ATAGATGTGG ATTCTCTTAC AGACAAAGAG      600
TCCGACTGGC TCAACAATTA CCACCTGACC TGCAGGGATG TGATTGGGAA GGAATTGCAG      660
AAACAGGGCC GCCAGGAAGC TCTCGAG                                     687

```

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

```

GAATTCGGCC TTCATGGCCT AGTCGGTGGG TGCCTGTAGT CCCAGCTACT TGGGAGGCTG      60
AGGGAGGAGA ACTGCTTGAA CCCGGGAGGC AGAGGTTGCA GTGAGCCGAG ATTGTGCCAC      120
TGTACTIONAG CCTGGGCCAC AAAGCAAGAA TCTGTCTCAA AAAAAAAAAA AAGAAAAGAA      180
AAGAATAAAT TTCTTTTCCC CTTGAAGAAG TTGATTAGG CACAGACTCT GGACTIONTGA      240
TTTCCACAAA TGTCTTATCT AGTCAACTCA AGTATCTGGA CTACAATTTT CTTGAAAGCA      300
AAGCCCATAT ATTAATAATC TTTACTTGTA TATAAATATT CAATAAATCA TTAAGTAAAT      360
GTGTAGAAGA ATTTTATGCT CAATAAGATC CACCCGATCA TGCATTGAA AATTCTCGAG      420

```

(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

```

GAATTCGGCC TTCATGGCCT AGCACATACT CTGCTTTTCT GTCAACATCC CATTITGGGG      60
AAAGGAAAAG TCATATTTAT TCCTGCACCC CAGTTTTTTA ACTTGTCTC CCAGTTGTCC      120
CCCTCTTCTC TGGGTGTAAG AAGGGAAATT GGAAAAAAA TTATATATAT ATTCTCTTT      180
TAATGGTGGG GGGCTACTGG AGAGGAGAGA CAGCAAGTCC ACCCTAACTT GTTACACAGC      240

```

```

ACATACCACA GGTTCCTGGAA TTCTCATCTT CGAACCTAGA GAAATAGGTG CTATAACAG      300
GGAATTAAGC AAAATGCTGG ATGCTATAGA TCTTTAATT GTCTTAATTT TTTTCTATT      360
ATTAAACAAC AGGCTCGAG                                         379

```

(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

```

GTTTCATGGCC TACGGAAAGT CAGCATGGAT AACAGACTGA TGGAACTCTT TCCTGCCAAT      60
AAGCAAAGTG TTGAACACTT CACAAAATAT TTTACTGAGG CAGGCTTGAA AGAGCTTTCA      120
GAATATGTTT GGAATCAGCA AACCATCGGA GCTCGTAAGG AGCTCCAGAA AGAACTTCAA      180
GAACAGATGT CCCGTGGTGA TCCATTTAAG GATATAATTT TATATGTCTA GGAGGAGATG      240
AAAAAAAACA ACATCCCAGA GCCAGTTGTC ATCGGAATAG TCTGGTCAAG TGTAAATGAGC      300
ACTGTGGAAT GGAACAAAAA AGAGGAGCTT GTAGCAGAGC AAGCCATCAA GCACTTGAAG      360
CAATACAGCC CTCTACTTGC TGCCTTTACT ACTCAAGGTC AGTCTGAGCT GACTCTGTTA      420
CTGAAGATTC AGGAGTATTG CTATGACAAC ATTCATTTCA TGAAAGCCTT CCAGAAAATA      480
GTGGTGCTTT TTTATAAAGC TGAAGTCCTG AGCGAGGATG CCCTCGAG                                         528

```

(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

```

GAATTCGGCC TTCATGGCCT AGCCCAGGCC ACGCTACACT CTGCCCACAC TGGTGAGCAG      60
GAGGTCTTCC CACGCCCTGT CATTAGGCTG CATTTACTCT TGCTAAATAA AAGTGGGAGT      120
GGGGCGTGCG CGTTATCCAT GTATTGCCTT TCAGCTCTAG ATCCCCCTCC CTGCTGCTGCT      180
CTGCAGTCGT GGGTGGGGCC CGTGCGCCGT TTCTCCTTGG TAGCGTGAC GGTGTTGAAC      240
TGGGACACTG GGGAGAAAGG GGCCTTCATG TCGTTTCCTT CCTGCTCCTG CTGCACAGCT      300
GCCAGGAGTG CTCTGCCTGG AGTCTGCAGA CCTCAGAGAG GTCCCAGCAC TGGCTGTGGC      360
CTTTCAGGTG TAGGCAGGTG GGCTCTGCTT CCCGATTCCC TGTGAGCGCC CACCCTCTCG      420
AAAGAATTTT CTGCTTGCCC TGTGACTGTG CAGACTCTGG CTCGAG                                         466

```

(2) INFORMATION FOR SEQ ID NO:16:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:


```

GAATTCGGCC TTCATGGCCT AGCGTGATCC TGGAAACGTGC TCTAGTTCGA GAGAGTGAGG      60
GCTTTGAGGA GCATGTACCA TCTGATAACT CTTGAAGATA CAGAGAGAAA TCCATCTTTT      120
CCCAGGTCTC CTTCACTGAA AACAAAAATC TACTTACATA CACTGTCACC TTAGCATCAG      180
AGTCGGATTA ATGAACTGCG GAACAAGAGG TTGTGAGAAT CTAAGATGGA ACCTTTCTTT      240
CTTTCTTTCT TTTTTTTTAA ATTTTGTATT TTCCATCCAA CACTCGAG      288

```

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

```

GAATTCGGCC TTCATGGCCT AGGGCTCTGC TTATAAACTT CAAAGTTACA CTGAAGGATA      60
CGGTAAAAAC ACCAGTTTAG TAACCATTTT TATGATTGGG AATACCATGA TGGGAACATC      120
TATACTAAGC ATTCCTTGGG GCATAAAACA GGCTGGATT TACTACTGGAA TGTGTGTCAT      180
CATACTGATG GGCCTTTTAA CACTTTATTG CTGCTACAGA GTAGTGAAAT CACGGACTAT      240
GATGTTTTCA TTGGATACCA CTACCTGGGA ATATCCAGAT GTCTGCAGAC ATTATTTCGG      300
CTCCTTTGGG CAGTGGTCGA GTCTCTCTTT CTCCTTGGTG TCTCTCATTG GAGCAATGAT      360
AGTTTATTGG GTGCTTATGT CAAATTTTCT TTTTAATACT GGAAAGTTTA TTTTAAATTT      420
TATTCATCAC ATTAATGACA CAGACACTAT ACTGAGTACC AATAATAGCA ACCCTGGTCT      480
CGAG

```

(2) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

```

GAATTGGCCT TCATGGCCTA GGAGATATAC CTAATGCTAG ATGATGAGTT AGTGGGTGCA      60
GCGCACCAGC GTGGCACATG TATACATATG TAACTAACCT GCACAATGTG CACATGTACC      120
CTAAACTTAA AAGTATATAT AAAAAAAAAA GACNTCGCTA GTGAGCACGC TGTATACGAC      180
ATCGCTAATG AGGACACCAT ACAAGGCATC GCTAACGATG ACGCTGTACA CAACATCACT      240
AATGATGACA CCGTATAAGA CATCGCTAAT TATGACGCTG TATACGACAT CGCTAATGAC      300
ACCGTACGAG GCACGCTAAC AAGGATGCTG TACACAACAT CGCTAATGAG GACAGTGTAC      360
AAGCCATCGC TAATGAGGAC ACTGTATATG ACATTGCTAA CGAGGACACT GTACAAGGCA      420
TTGCTAACGA GGACGCTGTA CACAACATCG CTAATGACAC CATATAAGAC ATCACCAATG      480
AGGATGCTGT ATATGACATC GCTAATAACA CCGCTCGAG      519

```

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

```

GCAGCTCTCA TCCTCGTCTC CCCAACACCA TAACGTCCTC ATCCCGCCTC CAACCCACAC      60
CAGGCCGAAG CCCTCAGAGA GTGTTTTTCAT CAGGAACCAC TCTCGAACCT GAAGGTTGAC      120
TTTAGCGTTT AGCAACCCAG GCGGGTGTGT GTGTTTCCCG TTTGTTTTTC TGAGTGGTAG      180
CAGTGATCAC CGTAATTCCA TGAGCCATG TGCTAGCAGA ACCCCTGTGT CCTCACCCTG      240
GCCCCGTGTA CCCAGCCGA CGAGTGCCCG GCGGAGTCCC CGCTGCCTTC CCATGGTCCA      300
GTGAGCTGCC AGGGCATCAC ATGACTCTCA GCTGGGCTCG AG                          342

```

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

```

GAATTCGGCC TTCATGGCCT AGAGCAGCTC TGAGGTAGAA ATTACAACGA TGAAGAGAGC      60
ACAACGTACA AAACCAAGAA AGAGTCTGTT GTGTGAAGGG TCATTTCGATG AAGAAGCTTC      120
TGCACAGTCC TTTCAGGAAG TGTTAAGTCA ATGGAGAACC GGAAATCATG ATGACAACAA      180
GAAACAGAAT TTACATGCAG CAGTAAAAGA CTCATTGGAA GAATGCGAAG TACAGACTAA      240
TCTGAAAATT TGGAGAGAAC CACTTAATAT TGAACCTAAA GAAGACATTC TATCCTATAT      300
GGAAAAATTA TGGCTTAAAA AACACAGGAG AACTCCACAA GAGCAACTTT TTAAGATGCT      360
ACCAGATACG TTCCACATC CACATGAAAC CACTGGTGAT GCACAGTGTT CTCAAAATGA      420
AAACGATGAA GATAGTGATG GTGAGGAGAC CAAAGTACAA CACACAGCTC TTTTATTGCC      480
AGTAGAAACA TTAACATAG AGAGACCTGA ACCATCTCTA AAGATAGTCG AACTGGATGA      540
TACTTATGAA GAGGAATTG AAGAAGCAGA ACATCTCGAG                          580

```

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

```

GAATTCGGCC TTCATGGCCT AGAAGATCT AATTATCATG GACCTGCAC AGTTTCTTAT      60
GTGCCTGTCC CTGTGCACAG CCTTTGCCTT GAGCAAACCC ACAGAAAAGA AGGACCGTGT      120
ACATCATGAG CCTCAGCTCA GTGACAAGGT TCACAATGAT GCTCAGAGTT TTGATTATGA      180
CCATGATGCC TTCTTGGGTG CTGAAGAAGC AAAGACCTTT GATCAGTTGA CACCAGAAGA      240
GAGCAAGGAA AGGTTTGAA AGATTGTAAG TAAATAGAT GCGACAAGG ATCGGCTCGA      300
G                                                                    301

```

(2) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

```

GAATTCGGCC TTCATGGCCT AAAAAAAGGA TGGTGTGTTG AGACCAGAAG CAGCAGCAGT    60
CCTCGACATC AACTACAAC TCTCTTCGCA CAGTGCATAC CCTCTGATAT ACTGAACCCA    120
ACGCCTATCC TCCAGCCCCC TAAGAACTAG AGAGGGAGCC TCACAACATT CCAATTTAAT    180
CCTTCAGAAA ATTCATTACT CTTCAAAGTT GTCTGTGGTT TTGTGACAAC GATATGACTA    240
GGTGCAAAAT GGCTTGCAAC TAATTAACAA ACATAGAAGC ATCCAACAAA CATATACGTG    300
CACAATCTGA GGATTTAGGG ATGAAGCTCG AG                                     332

```

(2) INFORMATION FOR SEQ ID NO:23:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

```

GAATTCGGCC TTCATGGCCT ACCAGCCTGG GCGACAGAGC AAGACTCAGT CTCAAAACAA    60
AACAAAACAA AACAAAAGA GAAGGCTATT ATTAACATTG GAGATAATGT GCCAGACTGC    120
TTCCATGTAT TTTCATTATT CTGTCCCAA TCTGGTGAAG TGGGTATCTG CACAGCTTTC    180
TCTAGATTGA ACAACTAGTA AGGGGGCTGG CCCTGGAGAA AGTTACCTCC TGCCTCGAG    239

```

(2) INFORMATION FOR SEQ ID NO:24:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

```

GAATTCGGCC TTCATGGCCT ACTTTTATAT TGTATTATTT GTAAAGCATC TTTTCTTCAA    60
TTCTTGTGG CATTCTGGGC CAAATATTT CAGGTTGTTT CGGTGTGGAG TTAAGAAAAG    120
CAGGCGTTT AGTGAGAAA TGGGAACAG CATCAAGAAA GGCTTTTTTC CTTTTTCTT    180
TTTTTTTGG AGACAGAGTC TTGCCCTGTC ACCCAGGCTG GAGTGCAATG GTCTCGAG    238

```

(2) INFORMATION FOR SEQ ID NO:25:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

```

GAATTCGGCC TTCATGGCCT AGATGGATTT CTTAATTGAA GTACTTTTAT AATCACAGTG    60

```

ACTGAACAAA ATATTTTCAA AGACATTTGT CATTCTTAA AGCCAAGATT TTAAAGACTA 120
 ATGTCCTTCC TGAGGGTTAC TTTACTATAC TGTGTATGGT GTATAGCCAC AGAAAGTCAG 180
 TCTGATAAAT TTCAATGTG TAAGTGTGAT GCATTCAACC CAGATCTCGA G 231

(2) INFORMATION FOR SEQ ID NO:26:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

GAATTCGGCC TTCATGGCCT ACACAGAGTA TATTTATAGC TATCTCAGGG TCCTTGTCCA 60
 ATTGTCTGTG TCATTTCTTC ATCTGCTTCT ACTGATTTT TCTGCTTCTG TTTACTCTTC 120
 ATTTTGGACC TATTTTCCCT TATTGGTGC TTTGCATACA ATTTGTTGGG ACTGGATCTT 180
 TGCTAGTCCT TTAAATGTTT TTAAGCTTTG TTTTGGGATG CAGTTAGGTG ACTCAGAAAC 240
 AATCAGAAAC AATTGATCC TTTTATGTCT CTTAAGCTTT GTTATAGGCA GGACCAGAGC 300
 TCTCGAG 307

(2) INFORMATION FOR SEQ ID NO:27:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

GAATTCGGCC TTCATGGCCT ACAATAATAG CCTCCACCT GGTCTTCCTT CTTCAGTCTC 60
 TTCAGTCTTT CCCAAAGCTC TTGAATCCTA CATGAACCCA TGCCTCGGTC AAAATATTAC 120
 AGGCTGCAGC CAATCTTCAA GTGGCATACA GGCCAAACAT CCATTTATAA TATGGTTGGA 180
 ATTCTAACA CATTTATCA TAGATCTAAT GCCATACAAT AGGTGGAGGT TAGATCCTCA 240
 CGCAACTCTC GAG 253

(2) INFORMATION FOR SEQ ID NO:28:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

GAATTCGGCC TTCATGGCCT ACAGAGAACT TGTGTTCCGG TTTATTGAAG TTCAGACACT 60
 TCTCCTCGCT CCATTCTGTC CACATTTGTG TGAGCACATC TGGACACTCC TGGGAAAGCC 120
 TGACTCAATT ATGAATGCTT CATGGCCTGT GGCAGGTCCT GTTAATGAAG TTTTAATACA 180
 CTCCTCACAG TATCTTATGG AAGTAACACA TGACCTTAGA CTACGACTCA AGAAGTATAT 240
 GATGCCAGCT CGAG 254

(2) INFORMATION FOR SEQ ID NO:29:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

```

GAATTCGGCC TTCATGGCCT ACGAGAAGGA GTGGAAGACT AAGCAGACTA GGAAAATACA      60
GTACAACCAT CAGGCAGCAT TACAGACCCA CTTAAGGTTT GTGGCCATGT GTGGTTGTGT      120
GGTTTTTTTT CTGGCCATGC TCAGTTACAT AGGGGCAAGT GCAAAAAAAA CCCCAGAGTT      180
TGTTTAACT AGAGCTCTGG TTTTGCCAAA C                                211

```

(2) INFORMATION FOR SEQ ID NO:30:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

```

GAATTCGGCC TTCATGGCCT AGGATCAGGT TCGTCCTTTA GTGTTGTGTA TGGTTATCAT      60
TTGTTTTGAG GTTAGTTGA TTAGTCATG TTGGGTGGTG ATTAGTCGGT TGTGTATGAG      120
ATATTGGAG GTGGGGATCA ATATAGGGGG AAATAGAATG ATCAGTACTG CGGCGGGTAG      180
GCCTAGGATT GTGGGGGCAA TGAATGAAGC GAACAGATT TCGTTCATT TGGTTCTCAG      240
GGTTTGTAT AATTTTTTAT TTTTATGGGC TTTGGTGAGG GAAGTAGGTG GTGGAGCACA      300
GGCACTGCAG GTCAATGGAG GTGGAGTACA GGGACTACAG GTCAATGGAG GTGGAGCACA      360
GGGACTAAAG GTCAATGGAG GTGGGGCACA GGGACTACAG GTCAATGGAG GTGGAGTACAC      420
AGGGACTACA GGTCACTGGA GGTGGAGCAC AGAGACTACA GGTCACTGGA GGTGGGGCAC      480
AGAGACTACA GGTCACTGGA GGTGGAGCAC AGAGACCACA G                                521

```

(2) INFORMATION FOR SEQ ID NO:31:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

```

GAATTCGGCC TTCATGGCCT AAAATTTCCT CTAAGTACTG ATTTAGCTGC ATTGTATAAG      60
TATATGCTTC CATTTTCATT CATTTCCAAA TATTTTCTAA TTTCTTTGC AATTTTTTTT      120
TCAGGAATTC GGGCCTTGCT GTGTTGCCA GGTGGAGAG CAGTGCCACT ATCACAGCTC      180
ACTATAAAT CAAACTCCTG GGCTCAAGCA ACCCTCCCAC CTCCCAACTC CCCTCGAC      238

```

(2) INFORMATION FOR SEQ ID NO:32:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 257 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

```
GGTTTCTTAA AAAAAAAAAA AAAAGGAATT TGATCCAGAG CAATTTTCT CAATTAAAT 60
TTGTGATTAC ATTTCTGAGT TTCCATGGCA GAGTTGTGAG TGGGGCTGTG ATATAATTTA 120
ACTTCTCCTA AATTGCTGAC ACCGATAACC CTATAAATTA ACAGATGGCG GAGGGAAATC 180
TCCTGGCTTC TTCCTGGCTA GTTTTTTTTA ATGGTCTGAT TTTTGTAAATA GGGGTTTGA 240
GTCCCAGCCG ACTCGAG 257
```

(2) INFORMATION FOR SEQ ID NO:33:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

```
GAATTCGGCC TTCATGGCCT AAAGACTTAC GTTATATTTT CATATACTCC TTCCCACTCT 60
TAGTGTGTTG TCAATATACA TTTTGTTTTA CATGTAAAAA CACCACAGTA TATGTGTTCT 120
AATTTTGCTT TTAATAGTAA ACTGTCTTAT AACAAATTAT GAAAATGGAA AAAACATGT 180
CTTTCTTATT TGCCCTCATA TTTATCCATT TAGGCACTCT TCCTTTTTC CTTCATTCC 240
AGGTTCTCGA G 251
```

(2) INFORMATION FOR SEQ ID NO:34:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 245 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

```
GAATTCGGCC TTCATGGCCT ACTAACATTT ATGAAAATTA TTTGTAAATA AAATAAGAGG 60
CATTGAGATT AAAATTGGAG ATAAAGTTGC TGATGTGTTG TTTTCCTGAA GTATTTTTTT 120
TCTTAATTCT GATCTTTGTT TCCCAATACA ATCACACTCA CACCCTTGCA GTTCAGTTTC 180
CTGACGACTC TCTAGTGTGC CAGATCTGTG TTTCTATGTC AGTGATCTGT TCCCCATCTC 240
TCGAG 245
```

(2) INFORMATION FOR SEQ ID NO:35:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 383 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

```

GAATTCGCTT CATGGCCTAC CGAGAAATGG GTGTGATTGC TGCCATGAGA GATGGTTTGT      60
GTTTCATCAA GTGTGTGGAT CGTGATGTTT GTATGTTCTT CCACTTCAGT GAAATTCTGG      120
ATGGGAACCA GCTCCATATT GCAGATGAAG TAGAGTTTAC TGTGGTTCCT GATATGCTCT      180
CTGCTCAAAG AAATCATGCT ATTAGGATTA AAAAATTCC CAAGGGCAGC GTTTCATTTC      240
ATTCCCATTC AGATCACCGT TTTCTGGGCA CGGTAGAAAA AGAAGCCACT TTTTCCAATC      300
CTAAAACCAC TAGCCCAAAT AAAGGCAAAG AGAAGGAGGC TGAGGATGGC ATTATTGCTT      360
ATGATGACTG TGGGGGTCTC GAG                                              383

```

(2) INFORMATION FOR SEQ ID NO:36:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

```

GAATTCGGCC TTCATGGCCT ACTGCCGCTC CTGGTGCTGC TTGTGTGCTC GTTTGGTGCG      60
GACCTGGTAC CTCTTTGTG AAGCGGCAGC TGAGGAGACT CCGGCGCTCG CCATGGCCGA      120
CGAAAAGCTC GAG                                              133

```

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

```

GAATTCGGCC TTCATGGCCT AAGGTAGTCT AGGCTCATCT TCATGAGGGA ACTGAGGTCT      60
TGGGGGGTGG GGGTTACCCA AATAGTTTCA CAGAAGAACC AGAAATAAAA CCTGCCITTC      120
TAGACTGTAA GTCTTGAT TGTCATCTAA ATGTTGTCT CTATACAGCA ACTCATCTCT      180
AGAACTGAAA ATAAGTTTAA ATCCCTCCTC CATCCCAAT AATTCAAGCT GCATTTCAGA      240
GAAAACCAGG ACTTTGGAAT CAGACAGCAA CTCGAG                                              276

```

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

```

GAATTTGTGC TCTTAGAGTA GGAGTTGGAA CTATAGGACT TGAAGGCAAG AGCAGGTATC      60
TTATCAAGGA TCTACTCACT CAGTTTCCCT AAAGCTCTCT CTCCAGATCG GATTCAACCG      120
CACATCATGA CAGATGTTCC GGCTACATTT ACCCAGGCTG AGTGTAAATGG GGATAAACCA      180
CCTGAAAACG GTCAACAAAC AATCACTAAA ATCAGTGAGG AATTGACTGA TGTGGACAGC      240
CCCCTGCCAC ACTACAGGGT AGAACCAGT CTGGAAGGTG CACTCACCAA AGGAAGTCAG      300
GAGGAAAGAA GAAAATTACA AGGGAACAGA CTCGAG                                336

```

(2) INFORMATION FOR SEQ ID NO:39:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

```

GAATTCGGCC TTCATGGCCT AGTCGGAGAA GGACATCCAG GATCTGAAGT TTGGGGTCGA      60
GCAGGATGTT GATATGGTGT TTGCGTCATT CATCCGCAAG GCATCTGATG TCCATGAAGT      120
TAGGAAGGTC CTGGGAGAGA AGGGAAAGAA CATCAAGATT ATCAGCAAAA TCGAGAATCA      180
TGAGGGGGTT CGGAGGTTTG ATGAAATCCT GGAGGCCAGT GATGGGATCA TGGTGGCTCG      240
TGGTGATCTA GGCATTGAGA TTCCTGCAGA GAAGGTCTTC CTTGCTCAGA AGATGATGAT      300
TGGACGGTGC AACCAGAGCTG GGAAGCCTGT CATCTGTGCT ACTCAGATGC TGGAGAGCAT      360
GATCAAGAAG CCCCGCCCCA CTCGA                                385

```

(2) INFORMATION FOR SEQ ID NO:40:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

```

GAATTCGGCC TTGCTAAAAA AAAAAAAAAA GAGGCAAGTA ATGTAATATC CCCACCTTT      60
GGTTTTCTTA TCTATAAATA CTGATTAAAA AAAAAAGTAC ACTGTCTGCC TTATAAGCTA      120
AAATGAGTGA ATACAGGCAA AATGCCTTAC ATTTTACTTT ACATTTACTA AGCACCCAGA      180
AAATGTTAAC TATGATGACA ATTATGATGA TGATGATATT GATATTTTCA AGGAGGGCGC      240
TCGAG                                245

```

(2) INFORMATION FOR SEQ ID NO:41:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

```

GAATTCGGCC TTCATGGCCT AAATAAAGAT GATTTTGTG CTTAGCAGTT TAAGGTATAT      60
GGCTGCATAT GCAAACTCT TTCCAATTC AGTCGCTACT TTTACTTCTG CCCTTTCTAT      120

```


CCATCGTCTT CATTTTGTGT GTACAGTGCT GTGTGTAAGC TTATCAGTGT GTTTTTTTAT 180
 TTGTATCAGT CATGAAAGTC CTGTTAGGTA TCCAGAGTTC TATTTATCTA GCTGTACAGA 240
 TCTCGAG 247

(2) INFORMATION FOR SEQ ID NO:42:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 106 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

GGATATGGTA ACTGAGAACC ATTTTCTAGT TGAGATAACT CATGTACAGG GGGGGTCACA 60
 TGACTCAACA ACACACAGAG CACAGAAGAG AACCAACAAT CTCGAG 106

(2) INFORMATION FOR SEQ ID NO:43:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 237 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

GCGTATTTCC AAGTGATGT ATTTCTAAAG ATAGATTTTT TAAAAACAAA AAATCTTAAT 60
 TTAGATGATA AGCGATTTTT ACCTTTTTTT TTTTTCAAA GCAACTTGAT CCTGTAAGTT 120
 TTGGCATCTT AAGTGGAAAT GTTCATGCAG TTTTGCTGGA TCTTCGCTAT GGCAGTAAAA 180
 TGCAATACAG CACTGTGGTT AAGAGTGCAG AACGGAGTCA GTCAGCCTGA ACTCGAG 237

(2) INFORMATION FOR SEQ ID NO:44:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 476 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGGCC TTCATGGCCT AGGGAGTNGG 60
 TGTGTCTGTG CATTTATTTG GATCATGGAA GGTGTAGAT GTGTATTTCT AACTGTAGAT 120
 AATGGAGGAC ACATATTTGG GGAGTTTGA GAGGATGTGT ATGTGTGTGT GTGTGCAGTG 180
 TGGTATTTCT CTATGTTTTG GTGGGTGGGG TATGTATCCA TCAAAATATC TCAGATTATC 240
 TGATGTAAGA AAATAATTCT GCATCTCAGT GACTTCCAAC AAGGTAGGTT TCTCATGTAT 300
 GTTATGTGTC CTCATTGGT TGGCTTTGAT CAGTTACTGG TCCTGTGCCT TGGATCCAGA 360
 TGGATGAAGC GGCCTCATTT GGGACAGGAC TAGAAGGACT TCTTCTGCTC AGAGTCATAC 420
 ATGGCATTTC TGATCACATT TCATTGCCA TAACAAGTCA TGTGGCCATA CTCGAG 476

(2) INFORMATION FOR SEQ ID NO:45:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

```

GAATTCGGCC TTCATGGCCT AGGCAAATC TGCTGGACTT AACTTCATCA ATGTAGTGGG      60
CTCTGTTTGT GGGGCCCAGG CTTTGATGAG TGGTTCAAAC CCCATGCTGG GCTGTAACAC      120
TGGTGCCATA ACTCCTGCAG GAATAAACCT GAGCGGCCTT CTACCCCTCAG GAGGTCTGCT      180
ACCAAATGCA CTGCCAGTG CAATGCAGGC AGCTTCTCAA GCAGGTGTTT CATTGGTTT      240
AAAAAATACT TCAAGTCTCA GGCCCTTAAA TCTACTCCAG CTTCCAGGTG GTTCACTTAT      300
TTTAACTCT CTGCAGCAGC AGCAACAGCA GCTCTCCCAG TTTACACCAC AACTCGAG      358

```

(2) INFORMATION FOR SEQ ID NO:46:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

```

GAATTCGGCC TTCATGGCCT AATCATTTTG ACTTTCAGTG CTTTCAATGA CCAGTGGCCT      60
CCAGGGATAA AGCAACTGCT TGGTTTGCGAG GCGTCCTCT GCGCTGCTGA GCCATCAGCC      120
TCCAATACGC CAATGCCCAT AGATGCTAGT TACAGCCCTG CTCCTCCTA CATAGGGTTC      180
TGTCATCACT GAGTCTCACC ATTTCCCTCT CCCAGTGTG TTTATTATGT GACACACACA      240
CACGGCACTA TGTAAAAA AGCGTGCTCA CTGGCAACCT CTTGGCGTTG TGTGTTTCATT      300
CTGTGTTTTG TATTGGTGGT ATCTTGGGGT CGACCGAAAG AGTCAACCTC GAG      353

```

(2) INFORMATION FOR SEQ ID NO:47:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

```

GAATTCGGCC TTCATGGCCT AGGGAGCTAC CAGATGCTGA AGAAAGGGCC CTGGCAGACT      60
GGGTTCAAAC TCAGCCATTG TCAGCTTGGT AACCTTGACC AAGTGTCTTC CCCTCTGTGA      120
GCCTCAGTTT TCTCAATAGT AAGAGGGGAT AACCACTTA CCTCTCATAG CTGTGGACAT      180
GGAGGTGAAA GTGCCGCATA CACTGTAAAG TGTATATAC GTGTAAGAGA AAAAATCGGG      240
CCAGAGGCTG GGCTTGTTT AATTGATTCA GGAAATTCAC CAGAGGCCCC CTAGATGCAA      300
CGTCCTTTGG GTGTCTGGCA GTGGGCACAA AGATGAACAA AACAGTGCCC CACCCTCACC      360
CCGTCAACCG TCAGTGCAGC AGTGGGCTGG GTGCTTGCGT CCCACAGTGA GGAAGGCAGA      420
AGGGGTCCCT GCCCTCAAAG GAGGACGATA CTCGAG      456

```

(2) INFORMATION FOR SEQ ID NO:48:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

```

GAATTCGGCC TTCATGGCCT AGCTGCCCCG CAGCACTTAC CGGAGCGACC ATGAGGGTGA      60
CGATTTGAAG CACACACAGG CTTCCCCGCA CTCCTTTAA ACCGCCGCTG GCTTGCCAGG      120
GACAGACGGC GCGGTTGGCT CCCCAAAATT CCGACTGATA CGCGCCTCGG CGAGCGAAAG      180
CAAACGCGGG ATACTCTCGC GTTCCTGATT GGCTGCAGTT GGAATTGATC ACACCTTTTC      240
AGTTGTACTT CAATCCTGAA TTAATCTTTA AACACTTTCA AATATGGAGA TTAATCACCA      300
ACTTCTTATT TTTTGGGCCA GTTGGATTCA ATTTTITATT TAACATGATT TTTCTATATC      360
GTTACTGTGC AATGCTAGAA GAAGGCTCTT TCCGAGGTCG GACAGCAGAC TTTGTATTTA      420
TGTTCCTTTT TGGTGGATT C TTAATGACCC TTTTGGTCT GTTTGTGAGC TTAGTTTTCT      480
TGGGCCAGGC CTTTACAATA ATGCTCGAG                                     509

```

(2) INFORMATION FOR SEQ ID NO:49:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

```

GAATTCGGCC TTCATGGCCT AAAGCAAGTG ATTTCTTTT TTTTAAAGAC AGGGTCTCAC      60
TTGGTCACCC AGGCTGGAGT ACAGTGACAT CATCACGGCT CACTGCAACC TTCGCCTCTT      120
GGGCTCAAGT GATTCGCCCA TCCCCCACCC CCCTTCTCAC CCCAGATG GACTATAGGC      180
GTGTACCACC ACGCCTGGCA GAGACCGGGT TTTGCCGTTG CCCAAGCTGA TTTCTGAATC      240
CTGAGCTCAA GCGATCTGCC CGTCTCAGCC TCCCCTAAGC AAGCATTITT AAGTTTCTAT      300
GCTGTTTAAT TTTTTTTAAC TGATTAATTT ATTTGCATTG TGTGTCATG GAATATGTTT      360
TTATGATATT GGTGTTTGA GATTTGGTGA GTCTTTCTTT GTAACCTAGT TAAACCATTC      420
CATATCTTTT TAAAAGGATG TATATTCCTT ATCTGTTAGG GCTCGAG                                     467

```

(2) INFORMATION FOR SEQ ID NO:50:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 168 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

```

GAATTCGGCC TTCATGGCAG AGTGAAGGG GTTGTAATA TTAGGAGAGA GATAATTCTT      60
AGTGCAATTC TCTGAGGATG AAGCATGAGA TGAATCCATG GCACGAATGG AACAGCTGGG      120
GAAAGCAGGT CAGAATGGAT ATGGATATAA ATACTGTGAG TTCTCGAG                                     168

```

(2) INFORMATION FOR SEQ ID NO:51:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 228 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

GAAGTAAATT ATTACGATTT CCTTAGGTGG TTAATAAATT ACCATTATTT TCTCTATTTT	60
ACAGATCACG AAATGATAAG TAACTTACCG AAAGTTACAT TATTTAAGTT AATCAAATGT	120
TTATTGATTG CCAGACTTTT TTCTAGGCTT AAGCAAATGT TGGAAAATAC TTCTCTGAGC	180
TTTCAAAAAT GTTATTTCTA CTTGTCACTG CTGCAGGAGT CTCTCGAG	228

(2) INFORMATION FOR SEQ ID NO:52:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 247 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

GCAGAGTCAA TAGATACTTT AAATTGAAGT AAAGAATTAA AAAAGGAAGT GGATAGTTTG	60
GGTATTAGTT TAGCTAGAAA TACAAAGAAA CTTGACTTCT AGGGCAGTAC AAATCAAGC	120
CTTCCACAAA CAAACAGTTG AGAGTATGTT TATCTTCTTA AAATGTGTGG GTGCCTTCCC	180
ACCACTTCAC CTGCTCCTCA CTGGTGCTTT GTCCCCTCCC TACTACCATT CCTGTCCCGG	240
TCTCGAG	247

(2) INFORMATION FOR SEQ ID NO:53:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 235 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

GGCCAAAACA AAGCTTATAA AGGTTCTGTC TCCCAACGTA ATTACCTCCA ATCGGCATTT	60
AAAGACATCC GCATTGCTTA CAGCACATCC TAGCCTCATG CTTGCCCAAG GATGGACTCG	120
AAATGAACATA TTTCCAGAGC GACTTATTCA GGCATTCTGT GGAGCCTCCG TTGCCCTGTC	180
CATCACCGGA GCTTTTGTA TGCAGCTAT GCCATTGGCC TCCGCAACC TCGAG	235

(2) INFORMATION FOR SEQ ID NO:54:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 231 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

```

GAATTCGCCT TCGTGGCCTA AAAAGAAAAA ATCTAAGGTA GATTGTGCCT TTTGTGCCTT      60
TCCTCTGCTC AAGACCTTTC AGTGGCTTCC CACTTCACTC AGTAAAAGGC AAAAAGTCCT      120
TTTAATAACC TACAAGGCAT TATGTTACCC ACATTGTCCC TGCTCCCCCTA CATTGTACTC      180
AAGTCTATGA TCTTTTACC ATTCTTGTA CAAAGGATTT TCACTGGCTG G                231

```

(2) INFORMATION FOR SEQ ID NO:55:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

```

GAATTCGGCC TTCATGGCCT AGAAATATTT TCCTACAAGA GACTGAATT TCAGGAAATG      60
GGATAGAGCT TCTAACCAGT GTATTCCGTC AAGTAAGATA ATAACAGCTG ACCTGCCAAC      120
AGCATTACAG GGAGATTCTT TGCTCAGCTA ACACATTCTT GTTTTCAAA ATTGATGCTT      180
AATTGTAGCT GTTATTCTAA TTTGTGACAT GGAACAACT CATGCTTCAA TCCTTGATAG      240
AGCAAACTC AGAACAGGTT ATGTAAAAAT ATAGTCTGGC TTTAGAATT GTTAATTCAC      300
CTGCTTTGCC ACAGAAATG GAGACTCGAG                                330

```

(2) INFORMATION FOR SEQ ID NO:56:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 230 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

```

GAATTCTAGA CCTGCCTCGA GATCTGAACT ATAATCTTTT CCATTCTATC TAGTCCCAT      60
CCTAAGTCCT CTCCTCCTAA CGTGGAATC TCCTAAAATC TTCTCCTTAT ACTAGGGTTC      120
GAGACATGAG GCTGTCTTTT TGGGCCTTTT GCGTTGTAC AGTCCCAGAC CACGGAACAT      180
TCTCTCTTCC CCAGGACAGG ACATTCTCTC TTCCCAGCG CTCCTCGAG                230

```

(2) INFORMATION FOR SEQ ID NO:57:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

```

GAATTCGGCC TTCATGGCCT AAAGGGAAAG TGGGAATATA CACAAATGCAN AACTAGCCA      60
CATGCAATCA TGGGAGAACA GAGCCTACTT AAAAATCANA CCCAAGCTTT GCTTCAGAAA      120
TAAGTGGAGT TGAACCCATT CGATCATTTA CGCATGACTT TGCAAAGGTT CTCTGGAGGG      180

```

```

GGAAGAGGAT CAACCTTCTC TCATACCGCA CAGCAAGGGA ACCAAAGTAA TATAAATCAC      240
TCTTAAAAAT GTCATGTTAC TTTAAGAATA AGCCATACTG CTGGCACCTA GAATATTTT      300
GTGGGTCCCC ATCTCTGGCT TTTCTTGTTT AAATGGCCCC CAGGCTAAGA GGCAGCTGCT      360
CACATCCCTG CAACAAACAT GTTCTTCTT TCTGCATAG CCTTCCATTT CTCGAG      416

```

(2) INFORMATION FOR SEQ ID NO:58:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 289 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

```

GAATTCGGCT TCATGGCCTA CTAGACCTGC TCAGTCGTTT CTAATGAATA AAAATCAAGT      60
GCCAAAGCTT CAGCCCCAGA TAACTATGAT TCCTCCTAGT GCACAACCAC CACGCACTCA      120
AACACCACCT CTGGGACAGA CACCTCAGCT TGGTCTCAAA ACTAATCCAC CACTTATCCA      180
GGAAAAGCCT GCCAAGACCA GCAAAAAGCC ACCACCGTCA AAGGAAGAAC TCCTTAAACT      240
AACTGAAACT GTTGTGACTG AATATCTAAA TAGTGGAAG TCACTCGAG      289

```

(2) INFORMATION FOR SEQ ID NO:59:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 382 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

```

GAATTCGGCC TTCATGGCCT AATTGAGGC CTGGGTGGAA CTGACAGGTG GAGTTTGAAG      60
GCACATCTGC TAGCTCACAT AGGAAACAGA ATCTCCAGG GAAAAGACAT AGGACCTCTG      120
ACTCTAACTG AGGTTCTGGA TTATTATGAG AGATTTCAG AAATGGTCTA ATGGTGTGG      180
CTTGCTCCAT ACCATAGATT TTAAGAGACA GTAGAGCTTC TGCATGAGA TTCCCCATA      240
AAATAATTAT GGATCTGCAC TGGCAAGCTG GTCTTGGCTC CAAAGACCAA GAGTTGGTTT      300
GTGGTGCTGA TTCTGAACCC TTGCGATGCA ACTGTCTGGT AGTAAATGG CTTTGTATGG      360
TAAGAAAGCT TTAATCCTCG AG      382

```

(2) INFORMATION FOR SEQ ID NO:60:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 196 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

```

AAAAAAAAC CAAACCCTAT TATTTCATTG ACAGATTGTC TTAGAGTTGA TAGCATTTAA      60
TAATTGAGTA AGTACAGTCC TTCCTTGTTT CCAACGTGCC CTATTTTTC TTTCTTCTCT      120
ACTTTTGCAT ATGCATTTTC CCTCTTCTT GTTCTTGGT GAATTCCTAA ACCTTTTTC      180
TCAAAATCAC CTCGAG      196

```

(2) INFORMATION FOR SEQ ID NO:61:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

```

GAATTCGGCC TTCATGGCCT AACCACATTT TTCTAATTAG TGTCTAGAC TGGCTAGATA      60
AATCAACAAT GAATCAACAG TCTTTAAGCA CATATACAGG TATGATAACT CTGTAGTTAA      120
CTCAAATCCT TGTGCTATGT ATTATTTTGC TGCCTAACTC AGAATTCAGG AAGCTACCCA      180
CCCAATCAGT CTTTAGCTGT TTTATTTTCA TAACAAGTTT ATGCAGAAC TTCCATATCT      240
CTCATAAAC CAGAGCATTC ATAGAACCAG AACTCTCGA G                                281

```

(2) INFORMATION FOR SEQ ID NO:62:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

```

GAATTCGGCC TTCATGGCCT AAAAGATTG AGCATTTCAA AATTTTAAAC ATAAAAGCAT      60
AAACGTAGAT AAAATGAAGG TGTACTATGA TATCTTCAGT TTTATCAGAA ATGATGTAAA      120
AATTACAACC TCTTTAAAAA GTAGTGTAA TCATTAAAGT AGAAAATATA TAGCTGGGCA      180
TGGTGGCAGA TGCCTGTAAT CCCAGCTACA TGGGAAGGTG AGGTGGGAGA ATCGCTTGAA      240
CCCAGGCAGT GGAGGATGCA GTGAGCCAAG ATCATGCCAC TGCACCCAG CCTGGGTGAC      300
AGAACAAAGAC TCCATNTCAA GGAAAAAAA AAAGAAAAAT ATATATATGA ACTTCAGAAT      360
CTGAGGTCAT ATATAGACAG GTCTTCCCCC CGTCTCGAG                                400

```

(2) INFORMATION FOR SEQ ID NO:63:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

```

GAAACCATAG TGGCAGATT GTAGCAAAAA GAATCTTTGT AACCTTCCCT TTAGATGTCC      60
TGTGTTATGG CTGTTTCTT CTCAAAGATC ATAGATTGCA GTGTTTATCT CAACTCAGTA      120
TTTCCTTTGA AAATTGAACT TTTCTCTATA TTTTCCCTTC CCCCATGCAA ACTTTTGTAT      180
TGTTTTTCTG AAATCATAAT TCATTGACT TACCAGTTAA TATTGATACA GGTCTTGCAT      240
GTTATGAAGT GCATTGTGTA CATTATCTTG TTTAATTTTC ACAACACTCT TCTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:64:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

```
GGTCGCAGAA GAGTGTGAGA ACAATCAGTT AAAGAAGCTC AAAGAAATCT GTGAGAAAGA    60
AAAGAAAGAA TTAAGAAGA AAATGGATAA AAAGAGGCAG GAGAAGATAA CAGAAGCTAA    120
ATCCAAAGAC AAAAGTCAGA TGAAGAGGA GAAGACAGAG ATGATCCGGT CATATATCCA    180
GGAAGTGGTG CAGTATATCA AGAGGCTAGA AGAAGCGCAA AGTAAACGGC AAGAAAAACT    240
CGTAGAGAAA CACAAGGAAA TACGTCAGCA GATCCTGGAT GAAAAGCCCA AGGGGGAAGG    300
TTCCTCTCA TTCTTGTCGG AAACCTGCCA TGAGGATCCC TCTGTTCCC CCAAACCTCGA    360
G
```

(2) INFORMATION FOR SEQ ID NO:65:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

```
GAATTCGGCC TTCATGGCCT ACTGGGGGAA GAAGGCTGCT TTATGTTTAT TTTCAAGAC    60
TTTAAAAATA TTTTGTGTT GTATTGCACT AGGAAATCTC TCCACCTCT CCCTTTTCTC    120
TTTCTTTCCC TATACAAAT AAAAGGCCCA CCATAGAGAC TAGGCGGCCG AAAGACTAGG    180
AGGGCTGAGG AAAAGAAATA GGTCTCTGGA GGTGGAATA AAACCTGTGA GCTGCCTCTT    240
CCTGGCGGTG GATGCTGCTT TGGGAGGGCC AGGGAGGCTG CAGGGGGACA GTGTTGGGAT    300
TGTCAGGAA AAAGGGGTAG GAAGGAAGGT GGAGGGATTG ATCTAGTACC AGGGAGAATA    360
TTCCACTGAA CTGTGATTCT ATGCGGCCTC GAG
```

(2) INFORMATION FOR SEQ ID NO:66:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

```
GAATTCGGCC TTCATGGCCT AATTGTTTAT TGCTAGAAAA TACACAGTTT TGAGATTTT    60
GGGCATAATT GGCCTTAGTG TGTCATTCT GCATTAAAT ATAGGTTAAT AATCAGATGA    120
AAGCAGCCAA TAACCTATGG CTTCTGTACT TTCTGGTGAA AGTTTGTGA ATGTTTTTAA    180
TTGTATTTT TCTGCTTATA AATTGTCCT TAAATCACTC CCCTCCTTCC GCGCCCCCG    240
ACTCCTTCTC CCTCCTTCCC GCCCCCCCAA CTCCTTCTCC CTCCTTCCCG CCCCAGCGAC    300
TCCTTCTCCC TCCTTCCCGC CCCCAGATCC TCGAG
```

(2) INFORMATION FOR SEQ ID NO:67:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

```
GGTGACATAT TTATTGCTTC TGTTTTCCAA CTACATCACT TCAACTAGAA GTAAAGCTAT   60
GATTTTCCTG ACITCACATA GGAGGCAAAT TTAGAGAAAG TTGTAAAGAT TTCTATGTTT   120
TGGGTTTTTT TTTTCCCTTT TTTTITTTAA GAGTATAAGG TTTACACAAT CATTCTCATA   180
ATGTGACGCA AGCCAGCAAG GCCAAAAATG CTAGAGAAAA TAACGGGATC TCGAG       235
```

(2) INFORMATION FOR SEQ ID NO:68:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 257 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

```
GAATTCGGCC TTCATGGCCT ACCACAATCT GTTGTCTTTT CCTCTTTAGA TTCCAAAAAT   60
AACACCCCAA AGGCTACCTT TTCAAATATT CTACAACATC TGCAAAAATC TTTAGTACTC   120
TGTCCTTGGA GTCAGTCAAG AAATTCACC CCAGAAGTGT AAAAACAAT CAATAATATA   180
TGACACTGAT TTTCTCTAAA TTATTATTTT TCTTATGTT GAGTCTCCTG CCAACTTTAT   240
GTTTCCCAAT CGGCTCG       257
```

(2) INFORMATION FOR SEQ ID NO:69:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 261 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

```
GAATTCGGCC TTCATGGCCT AGCTGGGCAT GGTGATGCAC GCCTGTAATT CTAGCTACTC   60
AGGTGGGGGG TTAAAGGTGA GGCAAGGTCA GCGGTGAAGT GCAGCTCAGA GGGAGGGGTC   120
AAACATAAAC CAGAACTTAT AGGTCTAGAG GTAAATGGG ATTCAATGGG GGCAGAGGTC   180
AAAGGTGAAG CAGAAGTCAG GGGTGAAGGA AGGTCTGCAA AGTTAAAGGT GCGGTTTCCA   240
GAGTCAGAAG GGGTGCTCGA G       261
```

(2) INFORMATION FOR SEQ ID NO:70:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 279 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

GAATTCGGCC TTCATGGCCT AGATTGAATT TTTAACACAG TCCTCTCAGA AACTGACTAA	60
AACAGGTTTT AAAATTAGCA AATATTAAGA ACATACGAGT AAAAGTCAGT TTATTTTAGA	120
TAAGTAGGGA TTAAATTCA AAAAAATAA ACACATTTTA AACTCCTATA ATACATTAT	180
TTAAATAAA TATATTTTG CCAAAAGAAG TGTAAGTTCA AAGAGTTAAC ATACAGATTA	240
TATCCTATGA GATATAATAA TATTAGAAAC TGGCTCGAG	279

(2) INFORMATION FOR SEQ ID NO:71:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

GAATTCGGCC TTCATGGCCT AGTTACATTT ATAATCAGTG AGGAAAATAT AACTATACA	60
ATAAATGAAA GGGTCATTGG CCAATTGTTT GGAGGGAAAA AATACACCAT GTTCTAAAAT	120
AAATTTCTAG TGATTTATTG TGACTTTTCAT GCATTTGGAT GATTTTAAAG ATTTTATATA	180
AAATGAAAC CATAGCCTTA CGAGAAGAAA ATATAAGAA AAACCTGTAT AGTCTTGGGA	240
GGGGGGATTG TCGAG	255

(2) INFORMATION FOR SEQ ID NO:72:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

GCGATTGAAT TCTAGACCTG CCTCGAGATC GTCTTTTCTA CCTGGATGAG AGCTCTACCA	60
CTTCTTTCCT TTTGCACACT CATCTCATTG TATGCACTCT TGGGCTGTAA CTGTCATTTC	120
TTTTCTGTGA CACTCGAG	138

(2) INFORMATION FOR SEQ ID NO:73:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

GAATTCGGCC TTCATGGCCT ATCACATTGC ATTAAATCTG TAGATTACAT TGAGCATTAT	60
GGACATCTTC AAAATATTTT AAATTTTGAA CAGGAGCATG CTGAAGAGTG TGTTGTTTAA	120
TTTCTATGTA TTTGTACATT TTTTCTCT ATCTTATACT GCCGAGACCA GCTCAGTCGG	180
GGAGACCCTA ACCCAACGGC AGCTCGAG	208

(2) INFORMATION FOR SEQ ID NO:74:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

```

GAATTCGGCC TTCATGGCCT ACATGAACT GTTAGTCACT TCATTTCTGT TTCTTCCCTG      60
TTGCAACAGC CCATCTTCGT GGAAGAACC AAGCTTTAGG CTTGGCTCTG AACAGCCACA      120
AAGTGACTTG GCTGAGGTCC TGCCATTTCTG CTCATGCTCA GCAGGGGGCA GCAGACCAGG      180
GCAGTTCAGA GTATGGGGTC AAACCCAGGT CCCTGTCCCC ACTCCACCTG TGGATTTACC      240
CTGGATTGGG CAAGCCCCAT TACTCGAG                                         268

```

(2) INFORMATION FOR SEQ ID NO:75:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

```

GAATTCGGCC TTCATGGCCT ACGTGAACAA GACCCTCCCA AACCTTCAGG TAGTCAACCA      60
CCAGCAAGGC CCCCAACCACA GACACATCCT GAAGCTGCTG CCGTCCATGG AGGCCACTGG      120
GGGCGAGAAG TCCAGCACGC CCATCAAGGG CCCCAAGAGG GGACATCCTA GACAGAACCT      180
ACACAAGCAT TTTGACATCA ATGAGCATTT GCCCTGGATG ATTGTGCTTT TCCTGCTGCT      240
GGTGCTTG TGATTGTGG TGTGCAGTAT CCGGGAAAAG CTCGAG                                         286

```

(2) INFORMATION FOR SEQ ID NO:76:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 199 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

```

GAATTCTAGA CCTGCCTCGA AAATACACTG TTAATCTT AATCTCAAGA GTGTCATTAC      60
AGTGAGAATC TCATTTAAAA GCATACCAGT GAAATTAATA GCAGTGCTTA TCAAAGAACA      120
CTGAAATCTG TGAGAATCTT TCTAGGAGCA TTCTTTTCTT CTTTGTAGTC CAAGTTCCAG      180
GTAGGCCATG AAGGTCGAG                                         199

```

(2) INFORMATION FOR SEQ ID NO:77:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

GATTGAATTC TAGACCTGCC TCGAGTTCCA CGTCCATGGC CATCCTGAGC ATGCTGCAGG	60
ACATGAATTT CATCAACAAC TACAAAATTG ACTGCCCCGAC CCTGGCCCGG TTCTGTTTGA	120
TGGTGAAGAA GGGCTACCGG GATCCCCCT ACCACAATG GATGCACGCC TTTTCTGTCT	180
CCCACTTCTG CTACCTGCTC TATAAGAACC TGGAGCTCAC CAACTACCTC GAG	233

(2) INFORMATION FOR SEQ ID NO:78:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

GAATTCGGCC TTCATGGCCT AAGAATAGAG AAAACGTTTT CAGCAGGCTT CACAGAGAAA	60
CCAAACAATA TTTAGAATAT GACAGCATAT GAAGAGTCTG CTAATCTCCC AGTGACCCAT	120
ACTTCTCTT CCATCTCTGC TGGTCTCTC TACTACCGAT TCTTCTTGC TGTTCTCCTT	180
CTCCATCACC GTGACTTCTA TTGCCTTACT CTAATGTCTT GTCTTCTGTG TTACCCCTTCT	240
GTGTGTTTTG CATTGAGAAC TCCCCCTCCG CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:79:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

GAATTCGGCC TTCATGGCCT AAAAAAAAAA AAAAATCCCT GGCTGAGAAC TATTGGATTA	60
GGGCCTCCNG TACCTATCTT TGAGGGGGAA AGGATGCTAC CATCAACTTT TCTGAATGCC	120
AGGAATGCCT TTTAGTATAG TTATTCTACT TACTATTTTA TAGCATATTT TAATTGTATA	180
GTAAGCATTG TGTCTGTTT ATGGTAAGGA AACTAAAATT GAGAGATTAG GCTGCTCGTG	240
GTGGCTTATA CCTTGTAATC CCAAGCACTC GAG	273

(2) INFORMATION FOR SEQ ID NO:80:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

```

GAATTCGGCC TTCATGGCCT AGCGAAATGA CGAAATCTAG CCCTTTGAAA ATAACATTGT      60
TTTTAGAAGA GGACAAATCC TTAAAAGTAA CATCAGACCC AAAGGTTGAG CAGAAAATTG      120
AAGTGATACG TGAAATTGAG ATGAGTGTGG ATGATGATGA TATCAATAGT TCGAAAGTAA      180
TTAATGACCT CTCAGTGAT GTCTAGAGG AAGGTGAACT AGATATGGAG AAGAGCCAAG      240
AGGAGATGGA TCAAGCATTG GCAGAAAGCA GCGAAGGGCT CGAG                        284

```

(2) INFORMATION FOR SEQ ID NO:81:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

```

GGGAACTGGA GGAAACCAT CACAAGATGG AGTGCCAGCA AAAACTGATC AAGGAGCTGG      60
AGGGCCAGAG GGAAACCCAG AGAGTGGCTT TGACCCACCT TACGCTGGAC CTAGAAGAAA      120
GGAGCCAGGA GCTGCAGGCA CAAAGCAGCC AGATCCATGA CCTGGAGAGC CACAGCACCG      180
TTCTGGCAAG AGAGCTGCAG GAGAGGGACC AGGAGGTGAA GTCTCAGCGA GAACAGATCG      240
AGGAGCTGCA GAGGCAGAAA GAGCATCTGA CTCAGGATCT CGAG                        284

```

(2) INFORMATION FOR SEQ ID NO:82:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

```

GAATTCGGCC TTCATGGCCT ACTGTGTTGA CTTGGTGGCT TGCTTGATAA GAAGGTTTAA      60
TGAAGCACAG CAGATATCTC AGCTGCTAAT CCTGTAAGCC CTTTACCCAT TCTCGCTTTT      120
CTCTGCTCTT GCCACATCAT GAATAGATTG GTATACTATT GTGGGATACT TCTAGTTTTA      180
GCACATGATA TAGGTTATGG TTAATGTTCC TTCCATCTT CCTGGTTACT GATAATGTTT      240
CTTTTCTGTA GATGGGTCTA TTCGATGGAA GAGTTTCAGC TTTGTTCTGT TTATTTCCCT      300
GGGACCTCGA G                                     311

```

(2) INFORMATION FOR SEQ ID NO:83:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

```

GAATTAATCG TAAGAGAACC TCAGCATTGT GCACGATAAG AGAATGTGTC AGTATTTTCAG      60
GGTTCTACAT TTTATCTGTA AAATGTGACT TTTTTTTTTT TTTATCACA CAGAAGTAAA      120
ATGTTGCTTT GTACCTGGTG TCTTTTATTA AGAATTTACT CCCCCATTT CTCACAGAGA      180
ATAACAGTCG GGAGTCATTG TCACAATATA ATAGAAATGT TAGCAACCAG ATTCATGTAA      240

```

GGACTAAGTG GTCCTCATGA ATTGCATTAA GACTCTGTAC TGCTCATATT ACACTCCATC 300
CTCTCTGTAG TTTGCTGGGT ATTCTCGAG 329

(2) INFORMATION FOR SEQ ID NO:84:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

GAATTCGGCC TTCATGGCCT AGAAAGACAT CATTAAAGTN CTTTAAACAT TTAGTTTGTTG 60
GTCATAAGTT GACCTTTATG TGCTTTCTGA ATTGGAACCT AAAATAATCT TTAATTCATT 120
ATTTTTTCTA CTTCTAGGCC AGTTTGTAGT TTAATATTTA TAAAAGGTTA GATAGTTATA 180
GATAGGATTA TTTTGCAGTT TTGAAACAAC ATACAAATTG TTATAGATTT CAGAGTAGGG 240
CTAATCACAG GAAAGACAAA AGTCAGAATG CTTNAGGTAA GCCCCTTCTC ATTATATAAG 300
ATCAAGCTCG AG 312

(2) INFORMATION FOR SEQ ID NO:85:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

GAATTCGGCC TTCATGGCCT AAAAAGTTTC AACTTAGAAA AACTAGCAAG GGATTGTTCA 60
CCCTTACCCC AGTGGTTGGT GCTAGAGAAA AAATGGAGGA TGTCTGTTCC ACGCAGACCC 120
TGGTGGTTTA AAACACACAT ATAGATGGCT CTGGGACCAT CAAAATAGCA GCAGCAAAGA 180
GCCACTCCAC CAGCCTCCCC TCCACTCCCC CAGGCCCCAC ACAGCAGAAG GCTCCAGCCA 240
CTTTTGGGAA GCCTGTAGCC TGGCTCCATC TTGCCCTGTG CCACAAATGC CCATGGCCCT 300
CGAG 304

(2) INFORMATION FOR SEQ ID NO:86:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

GAATTTTGAA CACTAAAGCT TTGGATACAC AAATTTATAA CATCTTATTT ATAAATCAGT 60
GGTGATACAGA AAGCAGAGAT CCCATAATCA AGCATGGCAA ACATGTTGAA GAATATGCTT 120
ACAATGATTT CTGCTATAGA TTTCATAATG GGGATTGAGA GAAGTAGAGT TATGGTGCTG 180
GTTCACTGCA TTGATTGGAT CAGGCGCTGG AAACCTCTCC TGATAGATTT TAITCTCACC 240
TGTTGGGCAA TTTCCAGAAT ATTCTGCTGT AATTTTACAT GTGGGCTCGA G 291

(2) INFORMATION FOR SEQ ID NO:87:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

```

GAATTCGGCC TTCATGGCCT AGCTAGAAAA AAAAAAAAAA AAGCCCTTTT CAGTTTGTC      60
ACTGTGTATG GTCCGTGTAG ATTGATGCAG ATTTTCTGAA ATGAAATGTT TGTTTAGACG      120
AGATCATACC GGTAAAGCAG GAATGACAAA GCTTGCTTTT CTGGTATGTT CTAGGTGTAT      180
TGTGACTTTT ACTGTTATAT TAATTGCCAA TATAAGTAAA TATAGATTAT ATATGTATAG      240
TGTTTCACAA AGCTTAGACC TTTACCTTCC AGCCACCCCA CAGTGCTTGA TATTCAGAG      300
TCAGTCATTG GTTATACATG TGTAGTTCCA AAGCACATAA GCTAGAAGAA GAAATATTTC      360
TAGGAGCACT ACCATCTGTT TTCAACATGA AATGCCACAC ACATAGAACT CCAACATCTC      420
GAG

```

(2) INFORMATION FOR SEQ ID NO:88:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 172 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCTT GGGGGGATTA CAGTTCAACA AGAGATTCAG      60
GCAGAGACAA ATATTCCAAA CTATATCAGG AATTAAGTAG GCTTTGCTGT CCTTTTSCAG      120
CTTTGAGTCA ACCCATATGA GAGTGAATTC TCCGATCCTG TACATACTCG AG              172

```

(2) INFORMATION FOR SEQ ID NO:89:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

```

GAATTCGGCC TTCATGGCCT ACCCGTGTG TCCAGTATAC CTTATAACAC TTAGCCACTT      60
CTCCCCACCC TCCAGAAAGG GTCCACGTTG AATTCTGAAT CATCTTGAAA ATAAGATTCC      120
AACCACAAAA AAAATTAGC CATTCTTTA CTAACAAAAA CCAAAAAACA AATCTGTTT      180
ATAATCACAG ATTTTATAGC AAATTCTTG TATCAGGAAG AAATACAAAT TTTGTCATGT      240
TTCTCAAGCA GTGTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:90:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

```
GAATTCGGCC TTCATGGCCT AAACAAAGAT AAAAATAAAC AGATAGGAGA GCTGAATTCC      60
ATTTCAAGTC CTCATGTATA TGCTTACAAA GTTCCAAATT AAGCTTGGGA CTGGTTCTTA      120
CATGGCAGGT AATCCAAACC TTTTCTATT ACTGAAGATT TTCAGCTCTC TTACAGAAAT      180
ACACAGGCTA CCATTAAAT TGTAGGATA AATTTTAAAT TGAATTTGAA AATAAGAGCA      240
AGTACTCGAG                                     250
```

(2) INFORMATION FOR SEQ ID NO:91:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 260 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

```
GAATTGAAAC ACAGAGTTGT TCTGCTGATA GTTTTGGGGA TACGTCCATC TTTTAAAGGG      60
ATTGCTTTCA TCTAATTC TGACGACCTC ACCAAAAGAT CCAGCCTCAT ACCTACATCA      120
GACAAAATAT CGCCGTTGTT CCTTCTGTAC TAAAGTATTG TGTTTTGCTT TGGAACACC      180
CACTCACTTT GCAATAGCCG TGCAAGATGA ATGCAGATTA CACTGATCTT ATGTGTTACA      240
AAATTGGAGA AAGTCTCGAG                                     260
```

(2) INFORMATION FOR SEQ ID NO:92:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 354 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

```
GAATTCGGCC TTCATGGCCT AATTTCATCT TTTTTCCTG GTGCTGCATA AACATATATT      60
AAATGTTGTT ACTGATCCCT AGTACTGTTG ATTTGTGACC CTTCTCCTGA GGGAGACTAA      120
AGCTGCTTGA GCTAAAGGCT TTTGAGACAT CCCATACGGT TCCCTGAACA AAGTTTCTC      180
TCCTGACCTC AGTTCTCTTG ATGACCTTGG CAAGTGGGCC CGACTAGTTG GACACTAATG      240
AGGCATCGTA ACATGCCGGC CCCATCCTGT CCATTCTGTT CTCTTTGCCA TCTAGCATTC      300
AGTGTGTGTG CTTCTAGTG GGCATGAAGA CGGCTTTAAA ACCATCCACT CGAG          354
```

(2) INFORMATION FOR SEQ ID NO:93:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 493 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

```

GCTGAAAATG CAAAACATGA AGAAAGTGAT TGAGGCAATT CGAGTGGAGC TGGTTCAGTA      60
CTGGGACCAG TGCTTTTATA GCCAGGAGCA GAGACAAGCT TTTGCCCCCTT TCTGTGCTGA      120
GGACTACACA GAAAGTCTGC TCCAGCTCCA CGATGCTGAG ATTGTGCGGT TAAAAAACTA      180
CTATGAAGTT CACAAGGAAC TCTTTGAAGG TGTCCAGAAG TGGGAAGAAA CCTGGAGGCT      240
TTTCTTAGAG TTTGAGAGAA AAGCTTCAGA TCCAAATCGA TTTACAAACC GAGGAGGAAA      300
TCTTCTAAAA GAAGAAAAAC AACGAGCCAA GCTCCAGAAA ATGTTGCCCA AGCTGGAAGA      360
AGAGTTGAAG GCACGAATTG AATTGTGGGA ACAGGAACAT TCAAAGGCAT TTATGGTGAA      420
TGGGCAGAAA TTCATGGAGT ATGTGGCAGA ACAATGGGAG ATGCATCGAT TGGAGAAAAG      480
GAGACTCCTC GAG                                         493

```

(2) INFORMATION FOR SEQ ID NO:94:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

```

GAATTCGGCC TTCATGGCCT ACACACGGCC AAATTTGAGG GCATTCTCAC ATGTGTTCTT      60
CTCTCAAAAC CACTGGGGTT GACAGATCCA GGAGGCTAAA AAAAAGTGAC CTCTATAATT      120
CTTTAAAGGT GCTATTTTTA GAANATTGTA TAATTTATTC ACAGTATATC TAAAACAGAA      180
TTAAGGACAA TTAAATATC TTATGTGACA GCCTTTATGT CTAGTCACAT TTGATGAAAT      240
AAAAAATTC TGAATCTGAA TAGAAGTTCT ACTGTNTCAG GATTGAATC GAG              293

```

(2) INFORMATION FOR SEQ ID NO:95:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

```

GAATTCGGCC TTCATGGCCT AAAAAGACAG GAAAATAAGT CTCTTTGTAT CCTTATTAAT      60
CATTTGAAAT TATGCTATAA TATTTTAA AACTCACCTG TTTGGTTCG GGTGAAGCAG      120
TTCCTGAAGG AGTGTGTTGT CAGAATATAT TGTTAGGTGA ATAGAGGGTT CTGTGGCCAA      180
GTAAGTTTGG GAAATAGTGG GTTAGACAAA GTTGAGTTAC TGTTGGCCTT TCAGACCTTT      240
GATACGCTAA TGTGCATTTT AAATCTCAA GAAGCTCGAG              280

```

(2) INFORMATION FOR SEQ ID NO:96:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:

GAATTCTCCA GCCTGGGTGA CAGAGTAAGA CTCCATCTCA AAAACAAAAA AACCCAACAG	60
GATAAAATTT AATAGGAGTA AATATAAAGT TCTACGTTTT GATTTTAAAA ATCTAGGTAC	120
TGTATAGTGT GTATTAGTTG GGGTTCCTTT TTTGAAACTT AATCTTGCCT ATAAACACA	180
AAAGAGTTTA AGATGATATT GAGACTCCTC CTGTCCTCAT TCCTTTTCCT TCCTAATAGC	240
TCAGTCCTGA AGCTCTTAGG TGAGGCAGAA CAACTCGAG	279

(2) INFORMATION FOR SEQ ID NO:97:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:

GAATTCGGCC TTCATGGCCT AGGATACCTT CATTCAAGG AGCCTCTTTA CAGTAACTGG	60
GCTAAACATT TTGTTGTCGT CCGTCGGCCT TATGTCTTCA TCTATAACAG TGACAAAGAC	120
CCTGTGGAGC GTGGAATCAT TAACCTGTCC ACAGCACAGG TGGAGTACAG TGAGGACCAG	180
CAGGCCATGG TGAAGACACC AAACACCTTT GCTGTCTGCA CAAAGCACCG TGGGGTCCTT	240
TTGCAGGCC TCAATGACAA AGACATGAAC GACTGGTTGT ATGCCTTCAA CCCACTTCTA	300
GCTCGAG	307

(2) INFORMATION FOR SEQ ID NO:98:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

GAGCTGTGTC AGCATCGATC AGGGGTCTGT AGACAAAAAT TCCCAAAGAT TTGAGACTTT	60
ATTGGGGGAA ACAGATCACT GGCGGGGAAT AAGCCACAGG CCAAAGGAGG AAATGCTGGG	120
ACCAGAAGTC CCGCTTGCCG CCTTTTGCTA AAAGTTCCGC ACGCCTGCTC GGCGTGGGCG	180
CAAGCATAGT GTCGTCGGGG CTCTGCGACG TCTGATTGGC TCTCTGCAGT GCACCGTCGA	240
GGTAGAAGGC TCAGCTCCTA GTCGCTCCA AATTACTTTG TTGGTGCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:99:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

GAATTCGGCC TTCATGGCCT AGCTTGAGGA ATGACCCAAC TCTCTCTGGA AAGTCACTTT	60
---	----

```

GCCTCTCTGT TCTGGTCTC TCATTTTATA AAGTGCCTTC TTCCTTTCTG CATTTATAAG      120
TAAACATGAG AAAAATCTGA AAAGACTTCT TCAGGATGTT TAAGGAAACA AATGTTGCTT      180
TCCTTGGGTT GGGTCGTTTC ATAAGAGTGA TGTTTGCCAT AAAACTGGAG CCTCATAGAC      240
GATCCTGCAG GGAGGAAGCT TTCCTTGGTC ACCTGACTCA TGTGTTTATA TATAGTATAG      300
AGGAGAGGTA TTCAAAGA CCCGTCGCTT TTCCTGTGTC CCACAGCTGC CTGTAGAGTT      360
GTGGCACCAT AACTTTAGC AGCTGGAAT CCTCGAG      397

```

(2) INFORMATION FOR SEQ ID NO:100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

```

GAATTCGGCC AAAGAGGCCT ATTAATTTAA TAAAGCCATA TCATACCTCT CTTTAACATT      60
GTTAAAGGA AACTGTGTGT GTGTATTGT GTTAATGTTA ANTTCTCTTC ATTTTGTGC      120
TTGGGGGGCT GTTTATTGA GGATGGTCGG GGGGCGGGTG GGTGAGACCC ATCCATCCCC      180
CATGGAAGAC CAGACCCATC CATCCCCAT GGAAGACCAT TCCCGTGTGT TCAGACTGGC      240
AGGGTACTTC CATAGACAGG AACATTCTGG ATGCTCTGAT GCTGAACACT ACCAGAATCG      300
GCCATGGATT TGCTTTGAGC AAACACCCCG CAGTCAGGAC TTAATCCTGG AAAAAGGACA      360
TCTTCTCGAG      370

```

(2) INFORMATION FOR SEQ ID NO:101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

```

GAAAAAATA GACAAACTA TGATGTAAAA ATGCTTAAAA ACAATTATTC CTCTCTGCTA      60
ATTTTAATGC AAAATAAATG ATGCTAGCAT TTAATATGTT TATATGATCT TGTTTTTAGG      120
ATTGAAATTT TAATACAATG GCCTTTTGTA ACTATTTTTC CTATTATAGC TCAGGTGTTT      180
GAATTCTCTC TACCCACCT ATCACCCTTA TCCCCTAACA AAGAGTCTGG CTTCATAAAT      240
ACTGTTGAAT GAAAATTGGT TCTCTAAATG GTTAACAAGA TGAATCCACA TAAATCATAA      300
TTCAGTACTG AGGAACCGAA TTTATACCCA GCGTCTCGAG      340

```

(2) INFORMATION FOR SEQ ID NO:102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

```

GAATTCGGCC TTCATGGCCT AGATTGAATT CTAGACCTGA TGTGAGAATG ATGGGCTTGG      60

```

```

AGTGTCTCTGG AAATAGCTGG GAGGCCTGTG TGTTTAGGAG CGCCTTAAAC AGTAGGATAT 120
AAGGGCAGAG AAGTAGCTGG GAACTGAGAA GAACTTTGGC TGTATTCTA GTAAGACTGA 180
AAATTTTCAGG TGGGATTGTA ACAGAGATGT GTGGTGATCT GACTTGGTTC ATTCTGCTGT 240
GGTGAAGAGA CTGGAGGTGC GGGGCAAGTA TGGGAAGCATG GAGACCATTA ATTTATGGGG 300
GCAATGGTAG AGGGAAGAGA AACAACTGCTA TTAAGTGGAG TAGGAGCACA CAGAGAACAA 360
GCCACTCGAG 370

```

(2) INFORMATION FOR SEQ ID NO:103:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:

```

GCGATTGAAT TCTAGACCTG CCTTGAGATC ACCGAGTGCT TCATCTCTGA CAGTTCCTCT 60
GACCAGATGA CCACAGGCAC CAACGAGAAC GCCGACAGCA TGACATCCAT GAGCACACCC 120
TCAGAGCCTG GCATCTGCCG CTTTACCGCC TCACCACCCA AGCCCCAGGA TCGGAGCCGG 180
GGCAAAAACG TGGCTGTGCC CATCCCTCAC CGGGCCAACA AGAGTGAGTG CTCAGACCAC 240
CTCCAGGCA GTGCCCCCCC GACTCTCGAG 270

```

(2) INFORMATION FOR SEQ ID NO:104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:

```

GAATTCGCCT TCATGGCCTA ATATGCTTAT GAATATGATG TTGATGGACA GCTCCAAACA 60
GTTTACCTCA ATGAAAAGAT AATGTGGCGG TACAACTACG ATCTGAATGG AAACCTCCAT 120
TACTGAACC CAAGTAACAG TGCGCGTCTG ACACCCCTTC GCTATGACCT GCGAGACAGA 180
ATCACTCGAC TGGGTGATGT TCAATATCGG TTGGATGAAG ATGGTTTCCT ACGTCAAAGG 240
GGCAGGAAA TCTTTGAATA TAGCTCCAAG GGGCTTCTAA CTCGAG 286

```

(2) INFORMATION FOR SEQ ID NO:105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:

```

GAATTCGGCC TTCATGGCCT ACTTAAATCT TAGATGCTAA TGGGAGAAAC TGATTTTITA 60
AAAAACAGGG AACTAATTA ACATTTTATC AGATATGCTA TGAAGTAAAC AGTTGAAGAC 120
TGACAGTCCA GTGGATACCG AGGAGTTCCT TTAGATACCC TGGTGAGGTA AGGACACAGG 180
CAAGGGGAGA GCTGAGACCT GAATATGAGG AGAAGCCAGG CGAGCACACA ATAGGGCAGA 240

```

AAGGAGCAGT AGGTCAAAGC CTGAGGCAGG AGAGAGCTTG ACTGACTCGA G

291

(2) INFORMATION FOR SEQ ID NO:106:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 339 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:

GAATTCGGCC	TTCATGGCCT	AGAAATGGTT	CTGAAAGCGA	CAGTAGAGAG	ATGCAGTTGT	60
GATGATTCA	ACAACCTGGA	TGTTTCTTT	CTCCTCTTTG	CTTCATTCA	TCTCTGTTGG	120
CTGCTGTGA	TGGAGTCAGA	CAGTAAACAC	GTGGCTTGGA	TAACACCCAT	CATCCTATGA	180
AGAATATAGG	GAGTACTTGT	TCTCTGTTGA	TTCAACTTTT	ATGTCTCCAG	TAACATTGCG	240
CTTATGAAGG	TACCTGTATT	TGTATGGACT	CTGAATAAAG	AAGAATTCAT	TTGTTAGCA	300
AGTATTACTT	CAGCAACCAC	TGAGAAACAA	GCACTCGAG			339

(2) INFORMATION FOR SEQ ID NO:107:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 439 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:

GAATTCGGCC	TTCATGGCCT	ACATCATGTC	AAAGAGTACT	ACATACAGTT	TGGAATCTCC	60
TAAAGACCCG	GTACTIONCAG	CTCGTTTCTT	CACTCAACCT	GACAAGAATT	TCAGTAACAC	120
CAAAAATTAT	CTGCCTCCTG	AAATGAAATC	ATTTTTCAC	CCTGGAAAAC	CTAAAACAAC	180
CAATGTTCTA	GGAGCTGTTA	ACAAGCCACT	TTCATCAGCA	GGCAAGCAAT	CTCAGACCAA	240
ATCATCACGA	ATGGAACTG	TAAGCAATGC	AAGCAGCAGC	TCAAATCCAA	GCTCTCCTGG	300
AAGAATAAAG	GGGAGGCTTG	ATAGTTCTGA	AATGGATCAC	AGTGAAAATG	AAGATTACAC	360
AATGTCTTCA	CCTTTGCCGG	GGAAAAAAG	TGACAAGAGA	GACGACTCTG	ATCTTGTAAG	420
GTCTGAATCG	GAGCTCGAG					439

(2) INFORMATION FOR SEQ ID NO:108:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 298 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCC	TCGAGAGGCA	GGTCTAGAAT	60
TCCAAATGTA	AAATTTACTA	AGGCTTTTCA	TGTGGAAGTA	GAATGCATAT	ATCTTTCTTG	120
ATATAACAAA	TGAATTTGGT	TGTAGCTAAC	GTGTTGTACT	AGTAAAGGTC	CACCTGCTAA	180
ACTTTTCTT	TTTGTGTGAG	GTATAGACAG	TAGAGTGATA	CCGATACATG	AGGAAAATGA	240
GAACTGGAAT	GCAGGCCAAA	AGCTGGTCCT	TTCCAGATGA	ATGTAACCAA	GACTCGAG	298

(2) INFORMATION FOR SEQ ID NO:109:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:

```

GAATTCGGCC TTCATGGCCT AACTCTCAA ATATGTGGCC TTAAACGGGA CCAAAGTAGG      60
AAAGCAGATA GTGGAAGACT TCTCTCCAA TCAGACCAAG TTCACGGTGC AAAGAACGGA      120
CCCCGTGTCA CGCTACCGCT TTACCTCAG CGCCAGGACG CAGGTGGGCT CTGGGGAAGC      180
CGTCACAGAG GAGTCACCA CACCCCGAA TGAAGCTTAC ACCAACCAAC AAGCAGACAT      240
CGCCACCCAG GGCTGGTTCA TTGGGCTTAT GTGCGCCATC GCCCTCCTGG TGCTGATCCT      300
GCTCATCGTC TGTTCATCA AGAGGAGTCG CGGCGGCAAG TACCAATAC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:110:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:

```

GAAAAAAGTG GGTCAAAGAA TTACGGAAAA TGTTGGGAAA TGAAATCTGT TTATGTATAG      60
TTGGTAATAA AATAGACTTG GAAAGGAGA GACATGTTTC CATTCAAGAA GCAGAGTCGT      120
ATGCAGAATC TGTGGGAGCA AAACATTATC ATACTTCAGC CAAACAGAAC AAAGGAATTG      180
AGGAAGCTTT TCTTGACCTT TGTAAGAGGA TGATAGAAAC AGCACAAGTG GATGAGAGAG      240
CAAAAGGCAA TGGCTCTAGT CAGCCGGGAA CTGCAAGGCG AGGTGTACAG ATTATTGATG      300
ATGAACCTCA AGCCAGACC AGTGCTGGAG GGTGCTGTTT TTCTGGATAA CTGTTACGCG      360
CTAAGAAATT AAAAGACAGA ACAAAGCTGT GGATCATTGC CCTCGAG          407

```

(2) INFORMATION FOR SEQ ID NO:111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

```

GAATTCGGCC TTCATGGCCT AAAAGAAAGT ACATTAAAGC AACTTGCATC TCAAAACAAT      60
ACATTTCTCT GGTGAAGTT TTAGTGAAAA TCGATTATT CCTCCTCTGA GTTTTACCCA      120
ATGGGTAAAG TTGTCTAAAT ATGGGATTCC TTAGAATCCA TCCTCCTTCC CAAGCATTTC      180
CCCATGTTTC CTTCCACCCC CAAATTCTTA CCCCATTTC GGCAGAGCTG AGCAACATA      240
AGCCTTCTCT GAAGTATTGA GGGAAAGTCT GCTAAACGGC TAACTACTT AAGGAGCTAA      300
CAGAAAAGGT TGTATCAGAG AAACAGTGGA GAAACACAGG TTTCTAATTA TATCTGGCAC      360
TGGAGAGAAT GTCAAAGGTA TTGGCCCAAG TCGAG          395

```

(2) INFORMATION FOR SEQ ID NO:112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

```

GAATTCTAGA AACTACAGTA GTGGGACACA TAACATAGAA GTAATCGTCC AGGATTCTGC      60
TGGAAGAAGT AAGAGTGTTT ACCACATATT TTCTGTTCAA GAGAATAATC ATCTCAGTTT      120
TGATCCCCTG GCATCATTTA TTCTCCGTAC TGATCACTAC ATCATGGCCC GGGTCCTTTT      180
TGTGCTGATT GTGCTGAGCC AGCTCACCAT TCTCATTATT TTTAGATATC GAGGATACCC      240
AGAGCTTAAA GAACCTTCAG GGTTTATAAA TCTGACCTCA TTTTCTCTTC AATGTCTCGA      300
G                                                                                   301

```

(2) INFORMATION FOR SEQ ID NO:113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

```

GAATTCGGCC TTCATGGCCT AAGCATGCTG TCTTGTGATG GTGATTCAT GTGTTTCTG      60
CATGGGATTA TTAACGGCAT CCATTTTCTT GGGCGTCAAG TTGTTGCAGG TGTCCACCAT      120
TGCGATGCAG CAGCAAGAAA AACTCATCCA ACAAGAGAGG GCACTGCTAA ACTTTACAGA      180
ATGGAAGAGA AGCTGTGCCC TTCAGATGAA ATATTGCCAA GCCTTCATGC AAAACTCATT      240
AAGTTCAGCC CATAACAGCA GTCTCGAG                                                                                   268

```

(2) INFORMATION FOR SEQ ID NO:114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

```

GAATTCGGCC TTCATGGCCT ACCCGCATCC CAGCTCTATT TAAAAAATA AAGAAGAAGA      60
TAATTCATTT CCCTAAGCTG CCCTTACACT ATTAGTCAGG AATGTTTGTG TTCACCTCCA      120
CTACATACCT TACGATCTCT TTTGCTTTGC TTTTTCAG TCAAGTCTCT ATTTATGAGG      180
TGGACAAGCA AGATTGTCGC AAATTTTGCA CTAAGTGGCAT CGATGGAGCC ATGACAATTT      240
GGGATTTCAG GACCTCGAG                                                                                   260

```

(2) INFORMATION FOR SEQ ID NO:115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

```
GAATTCGGCC TTCATGGCCT AAACATTTTC TGAAAAACGT GATAGAAAGA AGGAGGAGCT   60
GTTTCTAGGA GGGAAATAAA TAATTTGGCA GGAGACTTTT TGAAGTAGAT ATCTATTGAA   120
TAACAAAGTG ACAATGTTCC CCATCCTCTC ATTTCATTTC CCAATTTTAC TTCTCGTCCC   180
AATTCAAATC ATTCTACTT ATGATCGGCG CTATGTCAGT GCCTCTCAGC TGGTCTTCCC   240
AGACCCAGTC ACCCTCGAG                                     259
```

(2) INFORMATION FOR SEQ ID NO:116:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 238 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:116:

```
GAATTCGGCC TTCATGGCCT AATTACATTT ATGCAACCAA GCTATCAAAA GGACTGGCTG   60
TCCTTGGGAA TGAAACGTAA CAAAATCGTC AATAGAGTAT TATTGGAAAA GATTGTTTTTC  120
AGTCATGAAC TAGCTATTTA AATGAGAAAA CAAATGTAAT GATGCTTTCT GTCATGATTT  180
TATAAATAAA TGTCAATTGT AGGAAATTGG AAAAATAAAT GAAAAAGAAA AACTCGAG    238
```

(2) INFORMATION FOR SEQ ID NO:117:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 279 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:

```
GAATTCGGCC AAAGAGGCCT ACCCTAGACC TGTTTTCTGT TCTCTACTCT TGAAATGCTA   60
ATGACCTTCA TGACCAGAGT CCGCTATTGC AGTTTGTGGT TGACAGGCAT CTCTCACTCA   120
CTGTGCTGCA ACTCAACTCT TTATCTTCAA CCAAACAGGG CCTCCCCGCA GCTTCCCAC   180
TGCCACTCAG TGGCACTCCA TCCAGGGTTT CCAAAGTGTA AGACCCCGGA ATTTATCTTT   240
GACACTTCCA TCTCCCTCCA CCCCTCATCC AATTCATCA                                     279
```

(2) INFORMATION FOR SEQ ID NO:118:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 656 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:

GAATTCGGCC	AAAGAGGCCT	AGTTATAATG	ATGGAAGAAG	TGGAAAAACT	TTGTGATCGG	60
CTTGAACCTGG	CAAGCTTACA	GTGCTTGAAT	GAAACACTCA	CATCATGCAC	AAAAGAATAG	120
GAAAGGCTGC	TTTGAAAAA	CAGATAGAAG	AAATAAATGA	GCAAATCAGA	AAAGAGAAAG	180
AGGAAGCTGA	GGCTCGTATG	CGACAAGCAT	CTAAGAACAC	AGAGAAATCA	ACTGTTGGAG	240
GTGGAATGG	AAGTAAAAAT	TGGTCAGAAG	ATGATCTACA	ATTACTAATT	AAAGCTGTGA	300
ATCTGTTCCC	TGCTGGAACA	AATTCAAGAT	GGGAAGTTAT	TGCTAATTAC	ATGAACATAC	360
ATTCTTCCTC	TGGAGTCAAA	AGAAGTCCCA	AAGATGTTNT	TGGCAAAGCA	AAGAGTCTCC	420
AAAAAATTGA	CCCTCATCAA	ANAGATGACA	TAAATATAAA	GGCATTTGAT	AAGTTCAANA	480
AAGAACATGG	AGTGGTACCT	CAAGCAGACA	ACGCAACGCC	TTCAGAACGA	TTTGAAGGTC	540
CATATACAGA	CTTCACCCCT	TGGACAACAG	AAGAACAGAA	GCTTTTGGAA	CAAGNTTTGA	600
AAACATACCC	AGTAAATACA	CCTGAAAGNT	GGGAAAAANAT	AGCAGAAAAGT	CTCGAG	656

(2) INFORMATION FOR SEQ ID NO:119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:

GAATTCGGCC	AAAGAGGCCT	AGAGACAAAT	AGGTGATACT	GAATTTTATA	CTGTTTTCTA	60
CTTTTCCATT	AAAACATTGG	CACCTCAATG	ATAAAGAAAT	TTAAGGTATA	AAATTAAATG	120
TAAAAATTAA	TTTCAGCTTC	ATTTCTGATT	TGGAANCAAT	CTANACTGTT	GTGATGAGTG	180
TATGTCTGAA	CCTGTAATTC	TTAAANACT	TCTTAATCTT	CTAGAAGAAA	AATCTCCGAA	240
GAGCTCTCTC	TAGAAGTCCA	AAATGGCTAG	CCATTATGCT	TCTTTGAAAG	GACATGATAA	300
TGGGACCAGG	ATGGTTTTTT	GGAGTACCAA	GCAAGGGGAA	TGGAGCACTT	TAAGGGCGCC	360
TGTTAGTAAC	ATGAATTGGA	AATCTGTGTC	GAGTACCTCT	GATCTAAACG	GTAACAACAG	420
CTGCCTGGAG	AGCAGCTGTA	CCTAACATA	CTGTAATGTA	CATTAACATT	ACAGCCTCTC	480
AATTCAGGC	AGGTGTAACA	GTTCTTTTCC	ACCAGATCTC	GAG		523

(2) INFORMATION FOR SEQ ID NO:120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

GAATTCGGCC	AAAGAGGCCT	AATTTCTTCC	TGTGATATGA	GAATTTCTTT	TCTTTCAGCA	60
GCTTTACCTG	CATTTGGCTT	TGGCTTTTGC	AATCGGCCCC	TCATTCTCGA	G	111

(2) INFORMATION FOR SEQ ID NO:121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:

```

GAATTCGGCC AAAGAGGCCT AACCGCGGCC GCTACTTCGG CCTCTTTGGA AAAAAAAG      60
TGAAAGAAAA NATCACAATA CAGGGAAAAG TGAGCTAAAA ATCCCGGCAT TAAAAAGCCC      120
TTGATGTGGT CCTGAATCGG CTATTTCTAT CTGTTCCCTG AGCCTAACCT CAGCGCTGGC      180
CTCTCTAAAC CTCTTTTCAG TCCTCTCATT TTGAAAACAG GGCCCATTAC ACATTCTCTG      240
AAAGCTTGCT GAGTGATTTA ACCACATAGT CTAGGGGAGG CACTCATCAA ACATAAGGCC      300
TCTCTTTTGG ATTTTATCC TATAGTGGTA TCTATCTAGA GGCTGGTGAA GACAGTGTGG      360
TGAAGGAAA GTGGGAAGGA TACACTGAAA TAGGACATAG ACGTAGAGGG GAGTCGATGG      420
TCATCTGGCT TGATAGGGAA AGTTAGAGAG CTCTCCTGAA CCACAGTTAC AGAGCTTGGG      480
ATTATAACAC ACACAGCCCC AGAGAAAACA CTTTGTTTAC CATATTTCCT CTTCTGCTGG      540
GGCTCTGGCA CCTTAATTGG TCAAAGGCA GCACTCGAG      579

```

(2) INFORMATION FOR SEQ ID NO:122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

```

GAATTCTAGG AATGGGTCGG GAAGTTGAGA ATCTTATATT AGAAAATACA CAACTGTTGG      60
AAACCAAAAA TGCTTTGAAC ATAGTGAAGA ATGATTGAT AGCAAAAGTG GATGAACTGA      120
CCTGTGAGAA AGATGTGCTG CAAGGGGAAT TGGAGGCTGT GAAGCAAGCC AAAGTGAAC      180
TAGAGGAAAA GAACAGAGAA TTGGAGGAAG AGCTTAGGAA AGCTCGGGCA GAAGCTGAAG      240
ATGCAAGGCA ACTCGAG      257

```

(2) INFORMATION FOR SEQ ID NO:123:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

```

GAATTCCTGT AACTCGGAAA AGATATCAGA GGAATGTTG TGGCATCAGA GAGAAAGATG      60
AGAGCTCACC AGGTGCTCAC CTCCTCCTG CTCTTTCGTG ATCACCTCGG TGGCCTCTGA      120
AAACGCCAGC ACATCCCGAG GCTGTGGGCT GGACCTCTC CCTCAGTACG TGTCCCTGTG      180
CGACCTGGAC GCCATCTGGG GCATTGTGGT GGAGGCGGTG GCCGGGGCGG GCGCCCTGAT      240
CACACTGCTC CTGATGCTCA TCCTCCTGGT GCGGCTGCCC TTCATCAAGG AGAAGGAGAA      300
GAAGAGCCCT GTGGGCCTCC ACTTTCTGTT CTCCTGGGG ACCCTGGGCC TCTTTGGGCT      360
GACGTTTGCC TTCATCATCC AGGAGGACGA GACCATCTGC TCTGTCCGCC GGTCACTCGA      420
G      421

```

(2) INFORMATION FOR SEQ ID NO:124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:

GAATTCTAGA CCTGCCTCGA GAAAATGAAA GTCTTTTCTC AAAAACTTC TTCCAGGTC	60
TGTGAAGCAG CACAGTGGCC CTTTCTGGCT CTCACCTTGT ACCTCGTCCT TGTTCGCCT	120
GAG	123

(2) INFORMATION FOR SEQ ID NO:125:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 303 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:125:

GAATTCGGCC TTCATGGCCT AAGATGGCGT CTCACAAATC ATATGCCAAT TACTGAAATT	60
GGAGGTGAAA ATATTCTAGA TTTATTGTGG GATATATATA TTTTATGGTG TATGGCTCCC	120
AACACCATCAT GCCACTGAAC TATATAAAAC TTTATGTCAG AACACTTACT TGTGTCAAT	180
GTAACCCCTCT TGCAATAAT ATTCCTTAC TACAGATCTG TCCCACTGTT CTCAGAAAAT	240
AAAACATGGG AACGTGGAA TGTCTCCTTG CTATAAGATA TTGAATTCTA GACCTGCCTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:126:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 508 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:

GAATTCGGCC TTCATGGCCT ATGAAGACAA AGCTAACTTA CAAAAGCAGC TGGTTGAAGC	60
AATGAATACG CAATTAGAAC TTTCAGAAC ACTTAAATTT CAGAACAACT CTGAAGATAA	120
TGTTAAAAAA CTACAAGAAG AGATTGAGAA AATTAGGCCA GGCTTTGAGG AGCAAATTTT	180
ATATCTGCAA AAGCAATTAG ACGTACCAC TGATGAAAAG AAGGAAACAG TTAATCAACT	240
CCAAAATATC ATTGAGGCTA ATTCTCAGCA TTACCAAAAA AATATTAATA GTTTCAGGA	300
AGAGCTTTTA CAGTTGAAAG CTATACACCA AGAAGAGGTG AAAGAGTTGA TGTGCCAGAT	360
TGAAGCATCA GCTAAGGAAC ATGAAGCAGA GATAAATAAG TTGAACGAGC TAAAAGAGAA	420
CTTAGTAAAA CAATGTGAGG CAAGTGAAAA GAACATCCAG AAGAAATATG AATGTGAGTT	480
AGAAAATTTA AGGAAAGCCA CCCTCGAG	508

(2) INFORMATION FOR SEQ ID NO:127:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 713 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:

GAATTCGGCC	TTCATGGCCT	AGCGGCAGTC	CAGATCACGG	TTACTGTGAC	CTGACTGGAG	60
AAAAATTATG	TGTCTGCAAT	GATAGTTGGC	AAGGTCCTGA	TTGTTCTTTG	AATGTTCCCT	120
CTACTGAGTC	TTACTGGATT	CTGCCAAACG	TTAAACCCCT	CAGTCCCTCT	GTAGGTCGGG	180
CTTCACATAA	AGCAGTTTAA	CACGGGAAAT	TTATGTGGGT	GATTGGTGGA	TATACTTTTA	240
ACTACAGTTC	TTTTCAAATG	GTCTAAATT	ACAATTTAGA	AAGCAGTATA	TGGAATGTAG	300
GAACTCCATC	AAGGGGACCT	CTCCAGAGAT	ATGGACACTC	TCTTGCTTTA	TATCAGGAAA	360
ACATCTTTAT	GTATGGAGGC	GCCCCAAGGC	CCGACCCCTC	CCCCAAAGGG	GCAGTCCCCT	420
TCTTGCAAGT	CTCAGCTTGC	GGGGTGGGGG	GAGTCATGCC	CAGGGGAGGA	GACTTTTAT	480
CTGGAGGGGA	GAGAAGGATT	CTAGGGGTGT	GGAGTTGGAG	AAAGAGGCTT	CCTTGAGCCA	540
CCCTTCCCAC	CCCAGCCCTT	GNTGGTCCCT	AGGCCAAGCC	ACCAAGTGAA	ACCTTCAGG	600
ATACTAGCCC	GCCAGCTGTG	GGCCCCAGAA	AGCCAGCCTG	CCTTTTAGCA	CTTGATACA	660
CACAGACCCA	CGGAGCTCTC	TGTGTTTGGC	CTCTCACACA	CACACAATC	GAG	713

(2) INFORMATION FOR SEQ ID NO:128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:128:

GAATTCGGCC	AAAGAGGCCT	AAGAGATTCA	GGACCTGCAG	AGTCGCCAGA	AGCATGAAAT	60
TGAATCTTTG	TATACTAAAC	TGGGCAAGGT	TCCCCCTGCT	GTCATTATTC	CCCCAGCTGC	120
TCCTCTGTGC	GGGAGAAGAA	GGAGACCCAC	TAAAAGCAAA	GGCAGCAAGT	CTAGTCGCAG	180
CAGCTCATTG	GGCAATAAAA	GCCCCACAGCT	TTCAGGCAAC	CTGTCTGGTC	AGAGTGAAC	240
TTCAGTCTTA	CACCCCCAAC	AGACCTCCAC	AGTCGAG			277

(2) INFORMATION FOR SEQ ID NO:129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 670 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:

GAATTCGGCC	TTCATGGCCT	AAGGCTACCG	ATATTGGAGA	AGCTAACTAT	GGGTTTTACC	60
ACACGTAACA	GCTTTTGGT	GAAATCAGTT	GTTATACTAA	TAAGCTTTCC	TCTAATTGAT	120
TTGAGTTTGT	GTTTTGTGT	TTGTATTGTC	GGGTTTTGTC	TCTTTTGT	TCTTGT	180
AGTAAATTGG	TTTTCTTCA	ATGTATTTTC	TTAAAGTAGT	CTAGCTTTAC	CCAGTTTCCT	240
TGGCAAATTG	AAATTTAGGC	CATGAAGGCC	GAATTCGGCC	TTCATGGCCT	ACTCAGCCTC	300
CCCCAAGTAGC	TGGGACTACA	GGCGTGTGCC	ACTATTCTCA	GCTGATTTT	GTATTTTAG	360
TGGAGACGGG	TTTTTGCCAT	GTTAGTTGGC	CAGGATGGTC	TCTCTCTCGA	CGTCGTGATC	420
CGCCCGCCTC	GGCCTCCCAA	ATTGCTGTGA	TGACAGGCGT	GAGCCACCCC	GCNTGGCNTG	480
TCCTACCTCT	TTTTTAAGAC	CTCTTCTGT	AAGCACTGGA	TAATCTACTT	CTAGTAATGT	540
GAAACTGACT	ATATNTTGAA	TTCATATGTT	TTCAATCAAC	CTGTTGCAGT	TTATATTTC	600
CACCTGCTC	CCTTTTGACA	GTTAAGTAC	AGATAGTCTC	AGCAGTCTG	GAGACCATGT	660
AAAGCTCGAG						670

(2) INFORMATION FOR SEQ ID NO:130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:

```

GAATTCGGCC TTCATGGCCT ACGACTCTGC TCTATTACC ACTATCAGGC CAATCCTCCT      60
GACATGCTGT TAATATTAG AAATATTTCT CCAACATTCA GAGTGCCTGG GTACCACACA      120
TGGATGCGAC TAAGATTCTT AAGTCTGGTT TCTAAGAGCT TCTTCAATGT CTCCAACAT      180
CTTTTCAGGC TCATGTTTGA GACCTTCCTT TCAAGAATAA TTTGCTTGTG ATCTGTTTCA      240
AGCTGAACAG AGATTTTCAG ATGACTCCCA AACTATCTGC AACACATCAG CCCTATTAAC      300
TCTTCTCAGA ATGCTCATAC AGAAGCCATG CCAGTGCACA AAAGCCACTT CTGACACCTG      360
GCCCTGTCTG ACTCATGGAT TTCTTCCAGG ATTGCTCTTT CTATCTGCTT TAAACCTCCT      420
TGTCAATTGA CTTTCCTTGG CTCCAACCC ACTTTACTCG AG                      462

```

(2) INFORMATION FOR SEQ ID NO:131:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:

```

GAATTCGGCC TTCGTGGCCT ANATATTCTA AGCATTCAAT TTGTCAGTTT CTGAGATTTT      60
CTTTCCATCT TAGTTTTTTA GAAGTCAGAA AATGACTTTT CACATTCACT TAGGGTATAT      120
AACAAATGTTA ACGTAAGTTT ATGAGCTGAG TAGGTAGTTA ATAAACATCC TTTTAAGTTG      180
TAATGCTTTG AAATAGCATA TTAAAGGGTT GCAAGGGAAA ATTGGAACAT CAGTGTGAGT      240
TATTTTACAG TCATTGTAG GTCTGTTTGT GACCTTGGCC TTTTCACACT TGTGTGCTA      300
TCACCTTTAG TATATTACTC TTTGGCACAG GTTGTCTAAT CACATTAATT TTTGCATCAA      360
AAATCCCTTG GTTTAGTGAT TCTTAATGAT GTTTATTTTG GAAAGTCATG GACCTGAATT      420
CTTTGAGTAG TTCATGAAAA CCAATATACCT TTCCCAGAGA AATGGGGTGC ATATAATTTC      480
AGGAAGTTCA AGGTAGGGAA AACAAGCTAA AAATCCCAAC TTATTTTCATC TCGAG      535

```

(2) INFORMATION FOR SEQ ID NO:132:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:132:

```

GAATTCGGCC TTCATGGCCT AAGGGGATCA TCAAAGATGT TGGACACCTT GTGTTCAAAT      60
CTTGGTTTCA GTGCGGCCTG TGCAGATCGG CTTTTTGGTT TGGTTGTCTT GGCCTGGATA      120
CCAGTGGAGA AGATGTCATC CATATCATCA TCAAATATAG ACTTGGTTTC CACTTCTTT      180
TTGGACTTTT CTTTGGTTT TACAGTTAAG TCAGCAAAGA TATCAATGTT ATCATCAAAT      240

```

```

AAATTAGATT CCAATGTTTT CTCCTTCTCT CTGGTTTTCT GAGAGGGTTT AATTGCTTCC 300
GTAGCAAATA TATCATCCTC AAAAATATCT TGTGTTGTTA ATATGACATC CTGCTGACTA 360
CTGGATTTTG TCTCATTCTT CTTGACTTTC TGATCCTCGA G 401

```

(2) INFORMATION FOR SEQ ID NO:133:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 497 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

```

GAATTCGGCC TTCATGGCCT AGTAGATGAA CTAGAAGATG GATAAACGAA GATAGATAAA 60
ATGAAGAAAA ACAAAAGTCA AGGAGAACTC AGGCGTCCAA GAGTGTGTAA ACAACTTCTG 120
GTGTGAGACG CGCTACATTG CGCTAAATGG CCTGTGCGCT TCTGGTTTTT CCCTTCCTCT 180
GTTGATTTTT TATAGTTGTC TTTTATTTTA AACACGCCTC CCCCCCCCCT TTTTAACTG 240
ATTTTACCAT CACTCTCTCT AGCCCTGCCT CCCTAGAATT AGCTGCTTCT TACCTCCCTT 300
GGATCTGGAA CTTAAATATT AACGTGTATA TAAGTTAATA GTAAGTAGAC CGTGAATTTA 360
GAAGAGTAAA ACAGAATCAT GAGTACGTAG TCACTGTGGC CCCTTTTTTG CTGGATTTCA 420
AGTTCGTAAG CATTTTTGA AGAGAGTCGA AGGGGAAGGG GTGGCTTGCC AGTCAGTTGA 480
GTGATGCATG GCTCGAG 497

```

(2) INFORMATION FOR SEQ ID NO:134:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 362 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

```

GAATTCGGCC TTCATGGCCT AGGCTGGTCA TTGAGAGTGT TGGTGCAGTC AAAGTGAAC 60
ACGATGTGAT TGGTAAACAT GTGCTTGATA CATCGAACAA AATATTCTGT CTCTGCTTCT 120
GTAAGTTGAA CAGGCTCAGA AGACTTGAAC AAGGTCCTA TATTCAGAAA CTCAGGAATG 180
GCAGCCAATT GTTCTTGGGG ATATATTCTT AATGAAGTGC TAGACTATCC AATTACTTAA 240
TTTCTTATAC CTTTAGATAA TCAGTATGAA AAGTTCCCAT TTATAATGGA AATGAAAATT 300
CTTAAGTAAA CTATACATGT AATATGTATT TCTAGAAGAG AATAAAAACC CAAGTCCTCG 360
AG 362

```

(2) INFORMATION FOR SEQ ID NO:135:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 377 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:

```

GAATTCGGCC TTCATGGCCT ACCCCAATCA ATGGATCCTC AACTCCAAAT CCAAAGATAG 60

```

```

CATCTTCTGT CACTGCTGGA GTTGCCAGTT CACTCTCAGA AAAAATAGCC GACAGCATTG      120
GAAATAACCG GCAAAATGCA CCATTGACTT CCATTCAAAT TCGTTTTATT CAGAACATGA      180
TACAGGAAAC GTTGGATGAC TTTAGAGAAG CATGCCATAG GGACATTGTG AATTGCAAG      240
TGGAGATGAT TAAACAGTTT CATATGCAAC TGAATGAAAT GCATTCTTTG CTGGAAAGAT      300
ACTCAGTGAA TGAAGGTTTA GTGGCTGAAA TTGAAAGACT ACGAGAAGAA AACAAAAGAT      360
TATGGGCCCA CCTCGAG      377

```

(2) INFORMATION FOR SEQ ID NO:136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:

```

GAATTCGGCC TTCATGGCCT AAGCAAACCT CATGCAGCTG GTGGAAC TAG ATGTGTCTCG      60
AAATGAGATT CCTGAAATTC CAGAAAGCAT TTCATTCTGT AAAGCACTGC AGGTAGCTGA      120
CTTCAGCGGA AACCCACTGA CTAGGTGGCC AGAAAGCTTT CCTGAATTAC AGAATTTAAC      180
ATGTCTTTCT GTAAATGACA TCTCACTACA GTCTCTACCT GAAAATATTG GCAATCTTTA      240
TAACCTGGCT TCACTGGAAC TGAGAGAGAA TCTTCTTACA TATCTTCCTG ACTCTCTTAC      300
CCAGCTGCGA AGACTAGAAG AACTTGACTC GAG      333

```

(2) INFORMATION FOR SEQ ID NO:137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:137:

```

GAATTCGGCC AATGAAGCCT ACTTTAGTAT TTTGGCACTT CCTAATTGAC ACCTTGGGAG      60
ACTGCAGGAA GGGAAACGAGA ATCATTNNTA GGNTATTTGT GTGTGTGTGT GGTTTTTTTT      120
TTTTTTTGGG AGACAGAGTC TCACACTTTT GCCCAGGCTG GAGTGCAGTG GCGTGATCTC      180
GGCTCACTGC AACCTCTGCC TCCAGGGTTC AAGCGATTCT CTGCGCTCAG CTTCCCGAGT      240
AGCTGGGATT ACAGGCACAC GCCACAACGC CTGGCTAATT TTTATATTTT TAGTAGAGAC      300
AGTCTCGAG      309

```

(2) INFORMATION FOR SEQ ID NO:138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 599 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:

```

GAATTCGGCC AAAGAGGCCT AACTCAGAA TGGTGCTACT TGAAGACTCT GGATCTGCTG      60
ACTTCAGAAG ACATTTTGTC AACCTGAGTC CCTTCACCAT TACTGTGGTC TTACTTCTCA      120

```

```

GTGCCTGTTT TGTCAACAGT TCTCTGGAG GAACAGACAA GGAGCTGAGG CTAGTGGATG      180
GTGAAAACAA GTGTAGCGGG AGAGTGGAAG TGAAAGTCCA GGAGGAGTGG GGAACGGTGT      240
GTAATAATGG CTGGAGCATG GAAGCGGTCT CTGTGATTG TAACCAGCTG GGATGTCCAA      300
CTGCTATCAA AGCCCTGGA TGGGCTAATT CCAGTGCAGG TTCTGGACGC ATTTGGATGG      360
ATCATGTTTC TTGTCGTGGG AATGAGTCAG CTCTTTGGGA TTGCAAACAT GATGGATGGG      420
GAAAGCATT AATGCAATCAC AATGAAGATG CTGGCGTGAC ATGTTCTGAT GGATCAGATC      480
TGGAGCTAAG ACTTAGAGGT GGAGGCAGCC GCTGTGCTGG GACAGTTGAG GTGGAGATTC      540
AGAGACTGTT AGGGAAGGTG TGTGACAGAG GCTGGGGACT GAAAGAAGCT GAACTCGAG      599

```

(2) INFORMATION FOR SEQ ID NO:139:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 541 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:

```

GAATTCGGCC TTCATGGCCT AACCTTCCTG AATATCTGCC GTTGTCTCTG CAAGAAATAA      60
CTAGTCAACC CAAAAGGCAG TATCTTTTAC TTCATTCTCT GAAGGAAATT ATTAGCTCTG      120
CATCAGTGGT GGGCCTTAAA CCATATGTTG AAAACATCTG GGCCTTATTA CTAAAGCACT      180
GTGAGTGTGC AGAGGAAGGA ACCAGAAATG TTGTTGCTGA ATGTCTAGGA AAACCTCACTC      240
TAATTGATCC AGAAACTCTC CTTCCACGGC TTAAGGGGTA CTTGATATCA GGCTCATCAT      300
ATGCCCGAAG CTCAGTGGTT ACGGCTGTGA AATTTACAAT TTCTGACCAT CCACAACCTA      360
TTGATCCACT GTTAAAGAAC TGCATAGGTG ATTTCCTAAA AACTTTGGAA GACCCAGATT      420
TGAATGTGAG AAGAGTAGCC TTGGTCACAT TTAATTCAGC AGCACATAAC AAGCCATCAT      480
TAATAAGGGA TCTATTGGAT ACTGTTCTTC CACATCTTTA CAATGAAACA AAAGTCTCGA      540
G                                                                                   541

```

(2) INFORMATION FOR SEQ ID NO:140:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 403 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:

```

CTTCATGGCC TAGTGGTTCT TCTGAAATCG GCCTTCAGAC ACCTGTCTTT GGTAGTACCA      60
ATATCTAAGA AGTGGTTTCA GTTCAATTTT GTTTTCCTCC ATGCCAGAGA GAAGCCACAG      120
TTTCCTAAGC TGGGGAGGAG GTATATCCTT CAAGAGATCG GCTTGTTAGA ATAGACCACT      180
TAACACCATA TGAAAAAGCA ACAGACTGAA ACATGGATGT CCTCAAGAAG GGCTGCTGAC      240
ACCTATGATT TGGCAAGGAG ATAAATAACA GAATGTGCAA AGGGTCATAA GAGTGCAGAC      300
ACCCTAATGT CTGTTGGCTG GAAGGTCAGA GCAGTTCACC AGTGAAATG GGTACGCCAT      360
GAAGGCCGGC CTTATGGCC TATAGGCCAT GAAGGCCGAA TTC                               403

```

(2) INFORMATION FOR SEQ ID NO:141:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 439 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:141:

```

GAATTCGGCC TTCATGGCCT AGTCCTCATC TGCTGGCATT TTGTGGGGTG TTAGTGCCAA      60
ACTTGAATAG GGGCTGGGGT GCTGTCTTCC ACTGACACCC AAATCCAGAA TCCCTGGTCT      120
TGAGTCCCCA GAACTTTGCC TCTTGACTGT CCCTTCTCTT CCTACCTCCA TCCATGGAAA      180
ATTAGTTATT TTCTGATCCT TTCCCTGCC TGGTCTAGCT CCTCTCCAAA CAGCCATGCC      240
CTCCAAATGC TAGAGACCTG GGCCCTGAAC CCTGTAGACA GATGCCCTCA GAATTGGGGC      300
ATGGGAGGGG GGCTGGGGGA CCCCATGATT CAGCCACGGA CTCCAATGCC CAGCTCCTCT      360
CCCCAAAACA ATCCCGACAA TCCCTTATCC CTACCCCAAC CCTTTCGGGC TGTGTACACA      420
TTTTTAAACC TGGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:

```

GCGATTGAAT TCTAGACCTG TGTGTCTAGC TGTGATGGAA TCTGAAATGA AGTTTGACAA      60
GGACCATGAT GGAATCATTC AAAATGGAGG CTATGCAGAC CAGACCTATG ATGGATGGGT      120
GACCACAGGC CCCAGTGCTT ACTGTGGAGG GCTGTGGCTG GCAGCTGTGG CTGTGATGGT      180
CCAGATGGCT GCTCTGTGTG GGGCACAGGA CATCCAGGAT AAGTTTCTT CTATCCTCAG      240
CCGGGGCCAA GAAGCCTATG AGAGACTGCT GTGGAATGGC CGCTTACTCG AG              292

```

(2) INFORMATION FOR SEQ ID NO:143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:

```

GAATTCGGCC TTCATGGCCT AGGGAGGCTG AGGTGGGAGG CTCACTGGAG GCCAGGAGTT      60
CGGAACCAGC CTGAGCAACA TAGGGAGACC TCAGCTCTAC AACTGAAAAA AAGATAGCCA      120
GGTGTGTTCA TGGTGGCACC TGTCTGTATT CCAGCCGCTT GGGAGGCTGA GGCAGGAGGT      180
TTGCTTGAGT CCAGGAGTTT GAGGTTGCGG TGAGCTACAC AATGAGCTAT GGTGGCACTA      240
CTACACTCCA GCCTGGGCCA TAGAGTAAGG CCCTGTCTCT AACTGGAAGT CCAAAGAGGG      300
ATCTACTTCC TAGACTATTA ATTTAATAGA TCAATAAAT AATCAAGAAT ATGATTTTTT      360
TCTCATCTTT CTCTGTAGTC ATATTTTATA CAGACTTTTT GTTTAAGTAA TCTCTCTTTA      420
TGGGCAGACA ATGATTTCAG AACACCCCTG CCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:144:

```

GAATTCGGCC TTCATGGCCT AGTCAGCCGT GACTGCACCA CCATACTCCA GCCTGGGTGA      60
CAGAGCGAGA TCTTGTCTTA AAACAAAACA AAACAAAACC CAGACTTCCT ATAATTCCTA      120
AAAATAAATG TGGGTTTGAG AGGCCTACCT TGAAATGTAC AAGATCCTGG CCAGACTTCA      180
CCTATCTAAC AATATGCTAG TAACTATTG TTGACATGTC TTAAAGAAAT GTTCATCAGG      240
GCCTCAGAAA GCAAGGCAGA GAACAGGTCC CTGAAATTTA CTAGCTTGCA CCAAACCATC      300
AGATAAAGAT AGGTTAATAT TTGACAGAAA AAACCTTTCA AAAAGAGACA GTGAAATACT      360
CTTGAGATGA ATCCAGGCGG CTCTCGAG      388

```

(2) INFORMATION FOR SEQ ID NO:145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:

```

GAATTCGGCC TTCATGGCCT AGGCAGTGGA GGCCTCTGTA ATTCTAGCAT ACAGGTGGCA      60
AGTTATTACA TTATTTCTTT CCTCCTGTCT ACCTGCAGTT GGTTTTATGT GGGGCGTTAG      120
TACACTTCCC AAAGGGCTTG CCCGCAGGTG AGAGGTGCAC ATTGAACCTC CTCACGAGGC      180
AGATGGGAAG TGTGGCCATG AGAGAGAGCT TCAGGGGCCC TGGGTTTATG ACATCGCTGG      240
GCCAGGAATG AGGTTAATAT TTTTAATGCG GAAGGGTGAG CCCCCTTATT ACCCGAGCTC      300
GAG      303

```

(2) INFORMATION FOR SEQ ID NO:146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:

```

GAATTCGGCC TTCATGGCCT ACTGGATGGC ATCTACTTCG TATGACTATT GCAGAGTGCC      60
CATGGAAGAC GGGGATAAGC GCTGTAAGCT TCTGCTGGGG ATAGGAATTC TGGTGCTCCT      120
GATCATCGTG ATTCTGGGGG TGCCCTTGAT TATCTTCACC ATCAAGGCCA ACAGCGAGGC      180
CTGCCGGGAC GGCCTTCGGG CAGTGATGGA GTGTCCGAAT GTCACCCATC TCCTGCAACA      240
AGAGCTGACC GAGGCCCAGA AGGGCTTTCA GGATGTGGAG GCCCAGGCCG CCACCTGCAA      300
CCACACTGTG ATGGCCCTAA TGGCTTCCCT GGATGCAGAG AAGGCCCAAG GACAAAAGAA      360
AGTGAACAA CTCGAG      376

```

(2) INFORMATION FOR SEQ ID NO:147:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:

```

GAATTCGGCC TTCATGGCCT AATGGAAAGG ACAAGGAAAA GGGAGAAGGG GTGAGAGTCT    60
GTCCTAGGGG CCAACGAGAA CAGTGAGCTG TTTCAGGGGA GCCATTTCCT TGTCCATGCT    120
CACAAGCCTG TGGATTCTTC CCCCTCTGCA GGAAATTACC TGATGTTCCA AACCCCTCC    180
AGATCCTGTA TATCCGCAGC ATCTCCCTT TCCCTGAGCT GGAACAGTTT CTACAGGACA    240
CTATCAAGAG GTACTAGGGG CCTGGAGGTT TGGGCTCCAA GAGAAGCTTG ACAGAGCCCA    300
CGCCCGACCC CTACTTCTGT TTCTTCCTAA GGTATAATCT GCAGATGTTG GAAGCTGAGG    360
GCAGCATGAA GCAGGCCCTG GGTGAAGTGC AGGCACAGCA GCCCCCTCG AG            412

```

(2) INFORMATION FOR SEQ ID NO:148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:148:

```

GCCTGGCCAT CCGGAGAGCT AAGAACCTCA GCGGCTGCT GTACGTNTCA TGCAACCCCC    60
GGGCAGCCAT GGGCAACTTT GTGGACCTCT GCAGAGCCCC ATCTAACCGG GTGAAGGGCA    120
TTCCCTTCCG GCCGGTCAAG GCTGTGGCAG TGGACCTGTT CCCGCAGACC CCTTCTTTTT    180
TCATACTTAT ATGAAAGACT ACATACTTAA AATACTGGTG ATTATATTTA GGACCTGAAA    240
TCATAAGATT GTGGTCTTGC TTTTACTTAA TTTTGTATC TTAGCGATGT CTAGAGTTAA    300
TAAGTGTTGC TTTTCTAATC ACAGCAAATC TCGAG                                335

```

(2) INFORMATION FOR SEQ ID NO:149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:149:

```

GGATTCGGCC TTCATGGCCT AGTGGGGCAC TAGGATCATC ATTTGGGTGA GAGCCCTCGG    60
CAATGGTGGG GAGGGAGAAG TTATCATTGT GGAGCTCAGA TGGGGTCCGG AATTTGTTGG    120
TCCTACGCAG CTTGGTATTG TCCGTCTTGA GCAGGTAGAG CTTCTTGGCA AAGAACACCG    180
TCATCATGAA GAGCAGGAGC AGGACGAGGG CAGCCGAGCC CACGGCCACG CACATCACCT    240
GGAAGTCGGT GATGATGGAC TCGCAGCGCA TCCCCTTGTG CCAGATGTAG TCCTGCGTGT    300
TGCACCTGCA GAAGGCCCTT ATGTTCTCCA CCAGGTAGCA CTGGCCGCCA TTGTGACAGT    360
AACTTGGGAA GAGGTCGCAC ACTGACCGGC AGGAGCCGTT ATGCCGCACA AAGCCAATGC    420
GGCACTCAGT GCCATTTTCA CTGGAGGCCA AGTCCCTGCC TGGCTCTCCT TAGGCCATGA    480
AG                                482

```

(2) INFORMATION FOR SEQ ID NO:150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:150:

```

G TTCCTTACT AACTTTAATG GCCACAACAT TTAGGCGAAA GGGGGGCAAT CATTGGTGGT      60
T TGGCATTCG CAGAGACTTC TGTCAGTTTC TGCTTGAAAT TTCCCATTT TTAAGAGAAT      120
A TGGGAACAT TTCATATGAT CTCCATCACG AAGATAGTGA AGATGCTGAA GAAACATCAG      180
T TCCAGAAGC TCCGAAAATT GCTCCAATAT TTGGAAAGAA GGCCAGAGTA GTTATAACCC      240
A GAGCCCTGG GAAATACGTT CCCCCCTCT CCTCGAG                                277

```

(2) INFORMATION FOR SEQ ID NO:151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:151:

```

G CTCGCCAC TTTATGAAGA GCGATTTCAC GGCTGCTTGA ACCATTGCAA TTTGGATTG      60
T GTTCAGCAC TTTAAAAGGT TCAACTTTTT GCTTCTACCC AGATTGGTCT CAGGTCTGTC      120
T TCTCCAGAT GACCGGTGGT TTCCTGAGCT GCATCTTGGG CTGTTGCTG CTCCCTGGCCT      180
A TGGCTTCCA GCCTGACCTG GTGCTGGTGG CGCTGGGGCC TGGCCATGGC CTGCAGGGCC      240
C CCACGCTGC ACTCTGGCT ACAATACTCG AG                                272

```

(2) INFORMATION FOR SEQ ID NO:152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:

```

G AATTCGGCC TTCATGGCCT AGGGGCGGTG AAACGTCCTG AAGAGCGTCC AGCTCGTGGC      60
C GAGAGGACT CGGGCGCTCC CCACGCTGGA GGCCGTGGAC CGCTCCCTTT AAAAGTTGAA      120
A CGGCCGCCG TTCGGGACGG CTTGGCGGGA GGAGGGCCCG ACGAGGGGAG GCTTCAGGGA      180
C AACTGGGGC TTCTCGACGT CCACCCCTTT CAGGGCGCGG CCCCAGTAGC CCTCGGGCCG      240
G CCCAGGTAC AGGAGGTGCT TCCCGGGACC CCCGGAGTAC CTGGAGGGAC CTCCGAGGG      300
G ACTCGAG                                308

```

(2) INFORMATION FOR SEQ ID NO:153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

```

GAATTCGGCC TTCATGGCCT ACAATCCCAA ATGTAGGATC ATGCCCATG CCCTAAGCCC      60
AGGCATGAGA GTCGACATCT CTCCTCTTAT ATACAGATCC AGTCCACAGG TGAAGTGGGA      120
ACTCTCCAAC CAGGATTGAG CACACCATTG ATGTTGCGAC TCCTCTACTG GAACACAGCT      180
TGGAGAAGGG ATTGGGGCTC TCATGGCAGG ATGCAATCCA CTGTTGAGAT TGTGACTCAT      240
GCACTTGAAC CTAAGTCTCA GGAGTTGTTG ACTCTTACAC CCAGCACCCA GGTGATAGGA      300
CTCTCATGTC TGGTTCCTGC CCACAGGTGA AATTGTGACA TATACATGGT CACAGCTCAC      360
AGGTGAGGTG ATAATCACA TACCTGGATC CAGCTAAGAG AACAGATTTT GACTCTGATA      420
TCTTAGGCCA TGAAGGCC

```

(2) INFORMATION FOR SEQ ID NO:154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

```

GAATTCGGCT TCATGGCCTA CAAGATGACT AAAGTCTTCA CTCACCAAGG AAAAGTGGCT      60
CTGTATGGCA AGCTGGTGCA GTCAGCTCAG AATGAGAGGG AGAAACTTCA AATAAAGATA      120
GATGAGATGG ATAAATACT TAAGAAGATC GATAACTGCC TCACTGAGAT GGAAACAGAA      180
ACTAAGAATT TGGAGGATGA AGAGAAAAAC AATCCTGTGG AAGAATGGGA TTCTGAAATG      240
AGAGCTGCAG AAAAAGAATT GGAACAGCTG AAAACTGAAG AGGAGGATGC TCTCGAG        297

```

(2) INFORMATION FOR SEQ ID NO:155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:155:

```

GAATTCGGCC TTCATGGCCT AAATTTAGGA AGGTCAAACG TGAATCTCCA TTTGACAAAC      60
GTCCAAGTGC AGCAGAGATT AAAGTGAAC CCACCACTGA GTCATTGGAC AAAGAGGGCA      120
AAGGTGAAAT TAGAAGCCTA GTGGAGCCAC TCAGTATGAT CCAATTTGAT GATACTGCTG      180
AGCCACAGAA AGGAAAAATA AAAGGAAAGA AACACCATAT CTCTTCAGGA ACTATCACAA      240
GCAAAGAAGA AAAAAGTGA GAGAAGGAAG AGTTGACCAN ACAAGTCAAG TCTCATCAAC      300
TTGTTAAATC ACTCTCAAGA GTGGCTAAG AGACTTCAGA ATCTACCAGA GTTCTAGAAA      360
GTCCAGATGG CAAAAGTGAA CAGCGTAACC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:156:

```

GAATTCGGCC TTCATGGCCT ACAGAGTACT GAGTGAACA TACGATGATA GATTACAAA    60
TAATGTAGCA TACTTCTACT TCATTGTATC TTAAGTTTCT TGAAATATTG CTACTGGAGA    120
TTGGAAAGAA ATCTTAATGT TATGGGGTAT TGTCTAAGAA GCTTTATTTT AAAACCATCT    180
CATTAAATTT TGTTCATTG TAGATAATCG TCCCAGATG CCATGTTACC CTAGTGCAGA    240
GTTTGGGGCT GGATAAGTTT TTGTTGTAGG TGGCTATCCT GTGTTTTGTA GGGTATTTAG    300
CAGCATCCTG GCCTTAAAC AAAAATGTTT TCAGACATG CCAAATGTCC CCCGAGCGGT    360
AAAGTCACCC CCAAGTTGAG AACCGCTCTA TACAAAGAGC TGTTATTAGA GCCAGACTCG    420
AG

```

(2) INFORMATION FOR SEQ ID NO:157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:157:

```

GAATTCGGCC TTCATGGCCT AGATTGCTTG AGGCCAGAAG TTCAAGACAG GTCGCCAAC    60
ATAGTGAGAC CCCCTTCTCT ACCAAAATTT TAAAAATGAG CATGCATCTG TAGTCCTAGC    120
TATTGGGAAG GCTGAGGCAG GAGGATCATC TGAGCCCAGG AGTTTGAGGC TGCAAGTGGC    180
TAAGAAGGTG CCACTGCACT GCTGTTGTCT CTCAGCAGAT CATTTTCAGC TTTCTTTGGA    240
GAGTAGCCAT TAGCAATGCA AATGTGAAGT TTGATAGCAC AATAAATAAA AACTGAAAAA    300
CTGTAGATGT TACTTATAAA AACTGGCAC TCAGATAAAT TGGGTTTGGT CAAGAAGACA    360
GTGAAGCATA TCCCTGTTGG GCCAGAGGCT GTTATCGTTT TGCTCTGAAT TCAAAACCTG    420
ATATGTCTCC AAATTGCTT AGGGTTGTTA TCCTGAAAAA TAGAATCTGA TAGAAGGTGG    480
GCACATCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:158:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:158:

```

GAATTCGGCC TTCATGGCCT ACTGCTTTCG TGAAGACAAG ATGAAGTTCA CAATTGTCTT    60
TGCTGGACTT CTTGGAGTCT TTCTAGCTCC TGCCCTAGCT AACTATAATA TCAACGTCAA    120
TGATGACAAC AACAAATGCTG GAAGTGGGCA GCAGTCAGTG AGTGTCACAA ATGAACACAA    180
TGTGGCCAAT GTTGACAATA ACAACGGATG GGAATCCTGG AATTCATCTT GGGATTATGG    240
AAATGGCTTT GCTGCAACCA GACTCTTTC AAGAAGACA TGCAATGTGC ACAAATGAA    300
CAAGGAAGTC ATGCCCTCCA TTCAATCCCT TGATGCACTG GTCAAGGAAA AGAAGCTTCA    360
GGGTAAGGGA CCAGGAGGAC CACCTCCCAA GGCCTGATG TACTCAGTCA ACCCAAACAA    420
AGTCGATGAC CTGAGCAAGT TCGGAAAAAA CATTGCAAAC ATGTGTCGTG GGATTCCAAC    480
ATACATGGCT CAGGAGATGC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:159:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

GAATTCGGCC	AAAGAGGCCT	AGCCGGAGCA	GCTGTCTGGG	AGTCAAGGCT	GCAGTAGCGT	60
TTCTTCATGG	GGTGCTCCAG	GGGGTGCCAC	AGACCGACAG	GCAGCCCAAG	GGCCTGGACA	120
CCCCCCCCCA	GGCAGGTGCT	GGCCAGGAG	GACTGTCTCT	GGGAATGAAC	CTCCCGCGGG	180
CTTGGACTG	AGGTCCCTGT	GGCTCGGTC	TCCTCCCAT	GAAGTGGGAG	CGAGGCTCCC	240
CAATGGTGCT	TTTGGCTTTA	GTGTACGATG	TTTGCTGTGC	TTCCCGCCGT	GGAGGGCAGA	300
GCCACCCAC	ATCAGGATCG	GACGTGCTAC	CCCTCCCGGT	CCCGGCCCTG	GCCCAGCCAG	360
CCCAGCCCTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:160:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 362 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:160:

GAATTCGGCA	AAGAGGCCTA	ATGAATTCTC	TGATCACAAA	ACAGACCCAG	GAAAGCATTG	60
AGCATTTTGA	GCGACAGGCA	GGGCTGAGAG	ATGCTGGCTA	CACACCCAC	AAGGGCCTCA	120
CCACCGAGGA	GACCAAGTAC	CTTCGAGTGG	CCGAAGCACT	CCACAACTA	AAGTTACAGA	180
GTGGAGAGGT	AACAAAGAA	GAGAGGCAGC	CTGCATCAGC	CCAGTCCACC	CCAAGCACCA	240
CTCCGCACTC	TTCACCTAAG	CAGAGGCCCA	GGGGCTGGTT	CACTTCTGGT	TCTTCCACAG	300
CCTTACCTGG	CCCAAATCCT	AGCACCATGG	ACTCTGGAAG	TGGGGATAAG	GACGGGCTCG	360
AG						362

(2) INFORMATION FOR SEQ ID NO:161:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 419 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:161:

GAATTCGGCC	AAAGAGGCCT	AGTTTTACAA	AACGCGATTT	GTAATATAAA	CTAGTTAGAT	60
AACTCAGAGG	GTTTTATTGG	CCATATTTT	GTTTATGCTT	TGTCACAGGC	TTTAGTCATT	120
GCTTCCATGT	GTTCATCC	TTCAGGATAT	CTTCAAGAAG	CCTACTTATG	GACCAAACAA	180
GTTCTGACCA	TCATGGAGAA	ATCTCTGGTC	TGCTCAGGG	AGGTGACGGA	TGGCTCCCTC	240
TATGAAGGAG	TTGCGTATGG	CAGCTACACC	ACTAGATCAC	TCTTCCAATA	CATGTTTCTC	300
GTCCAGAGGC	ACTTCAACAT	CAACCACTTT	GGCCATCCGT	GGCTTAAACA	ACACTTTGCA	360
TTTATGTATA	GAACCATCCT	GCCAGGTATA	GTGAGGAGTC	AGAAGTGTGA	AAACTCGAG	419

(2) INFORMATION FOR SEQ ID NO:162:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:162:

```
GAATTCGGCC AAAGAGGCCT ACAGGTAGTA TCTTTATAGC GGTATAAAAA CAGACTAATA      60
CAAACAGGTA GCTCTAAATT GTGAGTTTTT CTTAACTCCT TTGATCTTCT GTGATAGCGA      120
TTTTTCACAT TTCACACTTC CCTAATGCCA AAAATCCACC TCCAGCAGCT GTTTTGCCTC      180
TTTCTTATCC TGCCCCTTGG AAGAATGTCA TCATTATTGC TGCCACAGCA CTGTGTCTTT      240
TTTCAGAAGT TACAGCTCGA G                                     261
```

(2) INFORMATION FOR SEQ ID NO:163:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:163:

```
GAATTCGGCC AAAGAGGCCT AGTGGTCTGG GGCAAAATTT AGTAAGACCT GGAAAGCATA      60
GGTAATCAAA GCAGAACTG ACAAATGAGA TGGTATCAAG CTA AAAAG                                     108
```

(2) INFORMATION FOR SEQ ID NO:164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:164:

```
GAATTCGGCC AAAGAGGCCT AGTTTAACCT CATCAGACAT TATTGCAGCC AGCTGTCAGC      60
CAAGCTCAGT AACCTTCCAA CGCTCATTTT CATGAGGCTA GAGTTCC1GA GAATCCTCTG      120
TAGCCATGAG CATTACCTCA ATCTGAACCT TTTT TTTATG AATGCTGATA CTGCTCCAAC      180
ATCTCCTTGT CCTTCCATAT CTTC CAGAA CTCAAGCTCC TGCTCCAGCT TCCAGGACCA      240
GAAGATCGCC AGCATGTTTG ATCTGACTTC CGAGTACCGC CAGCCCCTCG AG                                     292
```

(2) INFORMATION FOR SEQ ID NO:165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 135 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:165:

GAATTCGGCC AAAGAGGCCT AGCAAAACT GTTCAAAGA GTTGTGATT ACTTTCATT	60
CCACTTCTC ACCCCATTCC TCCCCTCAAT TAACTCTCT TCATCCCAT GATGCCATTA	120
TGTGGATTCC TCGAG	135

(2) INFORMATION FOR SEQ ID NO:166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:166:

GAATTCGGCC AAAGAGGCCT AGAAAAAGTA GCACAGTGA GTCTGAAATA GCAAGCGAAG	60
AGAAAAGCAG AGCTGCTGAG AGGAAAAGGA TTATTATTAA GATGGAGCCA GAAGATATTC	120
CTACAGATGA ACTGAAAGAC TTAAACATTA TTAAAGTTAC TGATAAGAC TGTAAATGAAT	180
CCACTGACAA TGATGAATTA GAAGATGAAC CTGAAGAGCC ATTTTATAGA TACTATGTTG	240
AAGAAGATGT CAGCATAAAA AAAAGTGGTA GGAAAACTCT AAAACCTCGA ATGTCAGTAA	300
GTGCTGATGA AAGAGGTGGT TTAGAGAATA TGAGGCCCC TAACAACAGC AGTCCAGTAC	360
AAGAGGATGC TGAAATGCA TCTTGTGAGC TGTGTGGACT TACAATAACC GAGGAGGACC	420
TGTCATCTCA TTAAGTAGCC AAACCTGAG	449

(2) INFORMATION FOR SEQ ID NO:167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:167:

GAATTCGGCC AAAGAGGCCT AAAAGGAAAC TTGGACAAGT AGAAAGTGA TGACCCAGGC	60
TCCGTTACAT ATACTTGGAT TCCAGCTGGG ACCTAGATT GCTGAGGACG GAAGCCAAGG	120
AGACAGGAAC ATGTGGCTGC TCCCAGCTCT ACTCCTTCTC TGCTCTCAG GCTGTTTGTC	180
TCTGAACGGC CCCGGCTCTG TGACTGGCAC TGCGGGGAC TCTCTGACAG TGTGGTGTCA	240
GTATGAGAGC ATGTACAAGG GATATAACAA GTACTGGTGC CGAGGACAGT ACGACACGTC	300
ATGTGAGAGC ATTGTGGAGA CCAAGGGAGA AGAGAAGGTG GAGAGGAATG GCCGCGTGTC	360
CATCAGAGAC CACCCGGAGG CTCTCGCCTT CACTGTGACC ATGCAGAACC TCAATGAAGA	420
TGATGCTGGA TCTTACTGGT GCAAAATTCA GACAGTGTGG GTCCTGGATT CATGGTCAG	480
CGATCCCTCG GACCTGGTTA GGGTGTATGT TTCCCAGCA ATTACAACCC CAAGGAGGAC	540
CACACATCCA GCCACCCCGC TCGAG	565

(2) INFORMATION FOR SEQ ID NO:168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:168:

```

GAATTCGGCC AAAGAGGCCT AGTTTCCTTT ATATGTTTGC ACTTAATTGG ATTCCATCCT      60
TCATGCTGTT TTCATTATTC TTAGTTCATC TACACCACAT AAATTATCAC CTTTGTTTTC      120
AGTTCCCCAA TTTCCATGTG CCACAAACAA ATCTCGAG                                158

```

(2) INFORMATION FOR SEQ ID NO:169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:169:

```

GAATTCGGCC AAAGAGGCCT AGTTCACCA TCTATTCTAA ACCTTATATT ATCAATCCTA      60
TTCCCTCTCA CCAAAAGAAT CCCTTTATAC AAGTAATTAT CCTGTCTATG TCTTTCAACT      120
CTAGTTTCCC CACTGCAACT CTTCCCTTAA TATATGTACC TGCTCTGTTA TCCCTCTCCA      180
GCTACTTCCC TATTTTCTGT TCCCTTTTAC AGGAAAACCT TTCTCCAGCA TTTCCCAATG      240
CCATTGTCTT ACTTCCTCAC ATTCTATTTT CTTCTCAAAC CATTTTATT AGGCTTCTTT      300
CCCCAATGGC TATTGTCAAG CTTCACTTAA TGCCGTGCAA ATCACCCCTAT TCTCCAGGTC      360
TTCTTTCTTC CCAGTCTCTC GAG                                              383

```

(2) INFORMATION FOR SEQ ID NO:170:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:170:

```

GAATTCGGCC AAAGAGGCCT AAATATTGTC TGAAAAAAT ATATGAGACC CATTACTCAG      60
TCTCTCCTCC TGCCATTAT ACTGCAGGTA TTCCCAAGT TTCTCTTCTC AACCTTTGCC      120
TCCTTTTCCC TGCTTGCTCC CTTAGTTTTC TCCTCTGGGT GGATGACTCC CAAATCTAGC      180
ACTGACCTGT TTGTCCACAT CCTTGAGTAT CCCACCACCA TTTACACCC AGCATATCCA      240
GATGGAGCTC TTATCAGTTG TAACAGCACT GCTCAATTCG AG                          282

```

(2) INFORMATION FOR SEQ ID NO:171:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:171:

```

GAATTCGGCC AAAGAGGCCT AGTGGAAGAG AAGAATGTTT CTGTCTCTTC CTACGTTGAC      60
TGTTCTTATT CCACTGGTTT CTTTAGCAGG ACTGTTCTAC TCAGCCTCTG TGGAAGAAAA      120
CTTCCACAG GGCTGCACTA GCACAGCCAG CTTTGCTTT TACAGCCTGC TCTGCCTAT      180
TACCATACCA GTGTATGTAT TCTTCCACCT TTGGACTTGG ATGGGTATTA AACTCTTCAG      240

```

GCATAATTGA TGCAACTAGA GTCAATATGC TGTATATATT AATGATAGCT CTTGGGCATC 300
GATCTCTGAA AGCTCAAATG GATGGAATTT AGTTTGCGGG AACTCTCGAG 350

(2) INFORMATION FOR SEQ ID NO:172:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:172:

GAATTCGGCC AAAGAGGCCT AGGGGTGTAC ATTTTATTGG AAACCTTAAA TACTGTTTCAG 60
AAAGAATATA TCTTCAATCA AGGCTCTTGT GCAGCCTACA CAGAAAAATG AAGCTTTTTC 120
GGTTAGGTGC AACGCTCGAG 140

(2) INFORMATION FOR SEQ ID NO:173:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:173:

GTGGTCTCTC CTCCTCTGCC ACTCCCCTCT TCTTTTTTTT CCAACATGGC CTTGCTCCGC 60
GTACATCGCC ACCCAGGGAC CGCTGCCCCG CACCGTGGCT GACTTTTGGC AGATGGTGTG 120
GGAGAGCGGC TCGGTGGTGA TCGTCATGCT GACACCCCTC GCGGAGAACG GCGTCCGGCA 180
GTGCTACCAC TACTGGCCGG ATGAAGGCTC CAATCTCTAC CACATCTATG AGGTGAACCT 240
GGTCTCCGAG CACATCTGGT GTGAGGACTT CCTGGTGAGG AGCTTCTATC TGAAGAACCT 300
CGAG 304

(2) INFORMATION FOR SEQ ID NO:174:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 188 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:174:

GCGATTGAAT TCTAGACCTG CCTCTCTTAT ACCTCGGTGT GGCCGAAAGG AAATAAGCAG 60
AGGCGCTATT GGCAGGACCT AGAACTTTC CTTGTAACAT AGCTAGTATG TTCCCTCTGC 120
CCCTTCTTCA TCTTTTCCTC ACACTTGCTG GAGCTGGAGC AGCTATCCTG ACCGCAGGTG 180
CACTCGAG 188

(2) INFORMATION FOR SEQ ID NO:175:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:175:

```
GAATTCGGCC TTCATGGCCT ACTATCTGCC TTGCGCTCCC ACTGCCCTGA CCTGTGCCCT    60
CTCACAGGCC CCCGTGATGG CTCGCTGGCC TCCCTTCGGC CTCTGCCTCC TCCTGCTGCT    120
GCTGTCCCCA CCGCCACTGC CCTTGACAGG GGCCCATCGC TTCTCCGCAC CTAATACCAC    180
TCTCAACCAC TTGGCACTGG CACCTGGCCG AGGCACACTC TATGTCGGCG CAGTGAACCG    240
CCTCTTCCAG CTCAGCCCCG AGCTGCAGCT CGAG                                274
```

(2) INFORMATION FOR SEQ ID NO:176:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 327 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:176:

```
GGTCAGCCGA GCATGATAGG AGACATCATC AACCTCGGCC TGAAAGGGAG GGAGGGGAGA    60
GCAAAGGTCG TCAACGTGGA GATCGTGGAG GAGCCCGTGA GTTATGTCAG CGGGGAGAAG    120
CCGGAGGAGT TTTCCGTCCC ATTCAAAGTG GAGGAGGTGC AAGATGTGTC GCCAGGCCCC    180
TGGGGGTTGG TTAAGGAGGA GGAAGGTTAT GGAGAAAGCG ATGTCACATT CTCAGTTAAT    240
CAGCATCGAA GGACCAAGCA GCCTCAGGAG AACACGACTC ACGTGAAGA AGTGACAGAG    300
GCAGGTGATT CAGTGGGCGA GCTCGAG                                327
```

(2) INFORMATION FOR SEQ ID NO:177:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 408 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:177:

```
GAATTCGGCC AAAGAGGCCT AAGCAATGTC TCCACCACTG CTGCTGCTAC CCTTGCTGCT    60
GCTGCTGCCT CTGCTGAATG TGGAGCCTGC TGGGGCCACA CTGATCCGGA TCCCTCTTCG    120
TCAAGTCCAC CCTGGACGCA GGACCCTGAA CTAAGTGGAG GATGGGAAA ACCAGCAGAG    180
CTCCCCAAGT TGGGGGCCCC ATCCCCTGGG GACAAGCCTG CCTCGGTACC TCTCTCCAAA    240
TTCCTGGATG CCCAGTATTT TGGGGAAATT GGGCTGGGAA CGCCTCCACA AAACCTTCACT    300
GTTGCCTTTG AACTGCGCTC CTCCAATCTC TGGGTCCCGT CCAGGAGATG CCACTTCTTC    360
AGTGTGCCCT GCTGGTTCCA CCACCGCTTC AATCCCAATG TCCTCGAG                                408
```

(2) INFORMATION FOR SEQ ID NO:178:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:178:

```

GAATTCGGCC AAAGAGGCCT AGGAGGAATT TCCATCTTGC TCTCAAAGTG AGTCTGAATG      60
TGCTCGGTGG TGTCACCCCC GCCGAGCTGC CAGTGCAGAA GGCCACTATT GAACTCCTGC      120
ACACGCCCCA ACTTGTGAGA TCGGTCAACA ACAAACAGGT TGTTCTTTT GACTATCTTT      180
ATTGGCAGCT TGTCGAACTT ACTGGCTTGC TTGGGCTTCT CCTTTGGGTC TGCAGCGGCG      240
TCCGGGGCAG TCAGAGCGAT GCTGCTCTT TCATCGCTT CTGTCTTCTC GCTGTCTACC      300
TCGAG                                     305

```

(2) INFORMATION FOR SEQ ID NO:179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:179:

```

GAATTCGGCC AAAGAGGCCT AGTGCAGCAA TTTAGAGAGT GTCTCAGGAG TGTGGCTCAC      60
TGGCAGCTGC AGCTATGTTA GTGCTTCTT CTGCCTCAAG TTCAGAAACA AGCTGGACTA      120
TCTCAGGGTG ATTGAATTTT CCTGCTGTGG AATCATAGAA GTCTTGCAGT CTCCCAGGTT      180
TGTGTTCAAG GTCTTCATAT TCAGATGCTT GAAGAATCAT TTCACATTGG TCTAGCATTG      240
AATCGAG                                     247

```

(2) INFORMATION FOR SEQ ID NO:180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:180:

```

GAATTCGGCC AAAGAGGCCT AGTCAAGTTC ATTTCCAGAG GTCTTAAGAC TAAGTTCTGC      60
CTCCTCATTG CAGGTGTGCC GAGAGTTTTT TTTGAACAAC AAAAATTACT AAGGAACCTC      120
ACTACCTTTG GCGGTAGAAT TAGAAAACAG ATTCAGCAGT CACCTACTCC CCTTCAGTAA      180
TTCGAGACAA TTATTTTCTT CCTGACACAA CATCAGGTCC CATGAAAAAT GACACCGTGC      240
CTGGTGTTTT TGGGTTCTTT AATGCTTCTT TTAGAGCCAC ATTTTCTTT TCAAACCGAG      300
TTCCCATCGC TCGAG                                     315

```

(2) INFORMATION FOR SEQ ID NO:181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:181:

GAATTCGGCC AAAGAGGCCT AATTTTCTT CACGTTCTTT ATCACCACCA TGGTTATGTT	60
GGCTGCCCTG GCTCACCATT TGTTTACTG GGATGTTTGG TTTATATATA ATGTGTGTTT	120
AGCTAAGGTA AAAGGCTACA GGTCTCTTTC CACATCCCAA ACTTTCTATG ATGCTTACAT	180
TTCTTATGAC ACCAAAGATG CCTCTGTTAC TGACTGGGTG ATAAATGAGC TGCCTACCA	240
CCTTGAAGAG AGCCGAGACA AAAACGTTCT CTTTGTCTA GAGGAGAGGG ATTGGGACCC	300
GGGATTGGCC ATCATCGACA ACCTCGAG	328

(2) INFORMATION FOR SEQ ID NO:182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:182:

GAATTCGGCC AAAGAGGCCT AGTTGTGGAA AAGAAAGACT GTGAGGGTAG GCACAAGAGC	60
ACTCAAATGT CCCAGGTAGA GAAAACAACA TGTATGATGG CCCAGAAGGA GGCAAGTCTC	120
GAG	123

(2) INFORMATION FOR SEQ ID NO:183:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:183:

GAATTCGGCC AAAGAGGCCT ACTTGACAA GTAGAAAGTG GATGACCCAG GCTCCGTTAC	60
ATATACTTGG ATTCCAGCTG GGACCTAGAT TTGCTGAGGA CGGAAGCCAA GGACACAGGA	120
ACATGTGGCT GCTCCAGCT CTA CTCTCTC TCTGCCTCTC AGGCTGTTT TCTCTGAAGG	180
GCCCCGGCTC TGTGACTGGC ACTGCGGGGG ACTCTCTGAC AGTGTGGTGT CAGTATGAGA	240
GCA GTACAA GGGATATAAC AAGTACTGGT GCCGAGGACA GTACGACACG TCATGTGAGA	300
GCTCACTCGA G	311

(2) INFORMATION FOR SEQ ID NO:184:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 130 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:184:

GAATTCGGCC AAAGAGGCCT AGTTCAATCT GTAACAAGCC TTCTTCAATT TCCTCTCCAC	60
ATACCCCTGCA TAGACTTTAA GATTCCTCTG CTCGATGCTA ATAAGAAGAC ACACACCCCT	120

CGTTCTCGAG

130

(2) INFORMATION FOR SEQ ID NO:185:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:185:

GAATTCGGCC	AAAGAGGCCT	AGGAGGGGGA	AGAGAGTCCG	TTTTCAGAA	GATGAAGAAA	60
AGAGTGAAAA	TTCCTCGGAG	GACGGTGACA	TAACGGATAA	GAGTCTTGT	GGAAGTGGTG	120
AAAAGTACAT	CCCACCTCAT	GTGAGGCAAG	CTGAGGAGAC	AGTGGACTTC	AAGAAAAAGG	180
AAGAACTAGA	AAGGTTGAAG	AAACATGTAA	AAGGTCTACT	TAACAGGTTG	AGTGAACCCA	240
ACATGGCTTC	CATCAGTGGG	CAGCTGGAGG	AACTGTACAT	GGCCCCACAGC	AGAAAGGACA	300
TGAATGACAC	CCTGACCTCC	GCTCTCATGG	GTGCCTGCGT	CACTGCCTCG	GCCATGCCCA	360
GCAGACTGAT	GATGGAGCAT	GTTCTCTTAG	TCAGCATCCT	TCACCACTTA	CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:186:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:186:

GAATTCGGCC	AAAGAGGCCT	ACTACATTTT	TACCTAAATT	TATAGAAAAT	CAATTCGGAT	60
TGACATCCAG	CTTCGCAGCT	ACTCTGGAG	GGGCTGTTTT	AATTCCTGGA	GCTGCTCTCG	120
GTCAAATTTT	AGGTGGCTTC	CTTGTTTCAA	AATTCAGAAT	GACATGTAAA	AACACAATGA	180
AGTTTGCACT	GTTACATCT	GGAGTTGCAC	TTACGCTGAG	TTTTGTATTT	ATGTATGCCA	240
AATGTGAAAA	TGAGCCATTT	GCTGGTGAT	CTGAATCATA	TAATGGGACT	GGAGAATTGG	300
GAAACTTGAT	AGCCCCTTGT	AATGCCAATT	GTAACGTACT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:187:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:187:

GAATTCGGCA	AGAGCCTAAA	ATCTACAAGC	ACCAGGAAGT	CAAGATGCAA	GCACCAGCCT	60
TCAGGGACAA	GAAACAGGGG	GTCTCAGCCA	AGAATCAAGG	TGCCCCATGAC	CCAGACTATG	120
AGAATATCAC	CTTGGCCTTC	AAAAATCAGG	ACCATGCAAA	GGGTGGTCAT	TCACGACCCA	180
CGAGCCAAGT	CCCAGCCCAG	TGCAGGCCGC	CCTCAGACTC	CACCCAGGTC	CCCTGCTGGT	240
TGTACAGAGC	CATCCTGAGC	CTGTACATCC	TCCTGGCCCT	GGCCTTTGTC	CTCTGCATCA	300
TCCTGTCAGC	CTTCATCATG	GTGAAGAATG	CTGAGATGTC	CAAGGAGCTG	CTGGGCTTTA	360

AAAGGGAGCT TTGGAATGTC TCAAACCTCG TACAAGCATG CGAAGAGAGA CAGAAGAGAG 420
 GCTGGGATTC CGTTCAGCAG AGCATCACCA TGGTCAGGAG CAAGATTGAT AGATTAGAGC 480
 GACTCGAG 488

(2) INFORMATION FOR SEQ ID NO:188:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 163 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:188:

GAATTCGGCC AAAGAGGCCT AGGTCAGATG CATTAAAACA TATCAAAATG TTACAAAAAT 60
 GTATGGCTCC CTTGCTGAGG CCCTGTCAGA TTATGTTAGA TGAGTAAACG CATCAGTGTG 120
 TAAGTTCAGA ACCAAACGTT GAATCAAGTC ATGTACTCTC GAG 163

(2) INFORMATION FOR SEQ ID NO:189:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 310 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:189:

GAATTCGGCC AAAGAGGCCT ACCTGCTCAT ACCTGTGGCC AAAAGCATGA TGCCCCAGGC 60
 TCTGCCTCCA ATTCTACCAT CTTCTTCCAT CTTTCTCTTT TATCAGGTCT CTGCCCTCCT 120
 GTACTTTGTA CTTAGATTCT CCTCTGCCAA GCCCATTCAG ACTGTGACTG GTAGGAGTGC 180
 TGTGCTCAGC TTTCCACTTG AGTGTATTAT CAAGAAGTTG GATAACCCTC TCAAGTTATG 240
 GCCTCCATTC CAGTGCCTCT CAGTCTATGG GGATGCATTG CACTCACCTT TGGGCCTAGG 300
 GCAGGTCGAG 310

(2) INFORMATION FOR SEQ ID NO:190:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 516 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:190:

GAATTCGGCC TTCATGGCCT AGGGCCTCAG TCTTTTACT TTTGGGGCTG TGTTTCTCTG 60
 AAGGCTTGGC ATTAGTAGAT TGAAAAGAAT AACCATCTAG GGAAATGTGA ATTCAGTTTC 120
 TTTCTGACAT TCTGCTCTCT ACAAGGGGAT ATTATGTACA CATAAACCTA CTTCCAAAAT 180
 AATGAAGTGA GGCCTAATTC CTTACTCTTC AGAGAGCCCA CTGTGGAAGT GTCACGTGACC 240
 TTGTGTATGG GCTGCCCTTC ATGGCTCTGG GAGTCATTAT AAAGGGCAGC ATTTGGCGTG 300
 GTGCGTCCTA AGCCAGTGTT TCTCGGCTCT GTTCCTTAAA CATGTGTTAG TGTTAATAGA 360
 TGTTCTTGA AAAAAAAAAA AAAAAACAGC ATTCTGAGGT CAAACATGCT CAGAAAGCTT 420
 GGAATCTGCA CTACGCTTCT CGTACACATT TCATATTAAA GATTTTGGAA AGTCCTGCAA 480

TACAGAGCCC TGTCTAATAT TGCCACAGCC CTCGAG

516

(2) INFORMATION FOR SEQ ID NO:191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:

```

GAATTCGGCC TTCATGGCCT ACTTGCTAGA TAGACAGATT AAGAATGTTG AAGACATGGT    60
CCAGTTTATT AATAACATT TGGATGGCAC AGTAGAAGCC CAAGGAGGTG ATAGCATTTT    120
GCAGAGATTG AAAAGAATAG TATTTGATGC CAAATCTACT ATTGTGTCTA TATTCAGAG    180
CTCACCCTG ATGGGCTGCT TTCTCTTTGG CCTGCCACTG GGTGTCATCA GTATCATGTG    240
CTATGGAATC TACACAGCCG ACACAGATGG AGGTTATATA GAAGAACGAT ATGAAGTGTC    300
TAAAGTGAA AATCTCGAG                                     319

```

(2) INFORMATION FOR SEQ ID NO:192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:

```

GAATTCGGCC TTCATGGCCT AAGCAGAAGG ACATATTAGA GAAGGATTGT ATAGTTTCT    60
GGTAAAAGAT GACAGTGAAT TGTATGGCG ATGGATTAGC CGTGGAAGGT GTTGAGTATA    120
AGTGGTCTCC AGCCAAACTC TATGGTTACT GGAATAAGAG AGTAGGAACC TTCTCAGGCT    180
TTATCTTTAT CTATTCTTGT CAACAGTATG TACATGTGTC CCCCAGCCCC AAATAACTGT    240
ACAGTTTAAAT GATGTTCACT CTATACAGTT CCCAGAATCC ATTGGAAAATT GCTGTAACAG    300
CATATCCTCA ATGCCCATCA ATTCTCCAGC TCCAATTCT CCATGGCCTC CTCTGCCTCT    360
GCTGATCTGT GAACTTCTCG AG                                     382

```

(2) INFORMATION FOR SEQ ID NO:193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

```

GAATTCGGCC TTCATGGCCT AATATTTTAA AAGCGAAAGC TAACCTCTAA TTTTGAAAAT    60
TTTTATTGGG AGCAGGATAT TATAATAATA ATCTTTAGTT GTTAAACCAT TAAACATCAA    120
GGTTTTTAC ATTGTTTCTA TGCTCTCTCC CTCAAAAAAA AAAAACCTCC TACAATAAAA    180
CTGAAAAATT GCACAAAGAC ATATTAGTGG AAGACCACTG CTTGTTTTAC ACAAATGAAG    240
AGTATAAAGC AGAGAAGTGC TCCTTGGGGC AAAAGGCAAT TGGCAAAAAG CTAAGGAACA    300
TTTTCATAAT GAATTAGAAA TACAGATCAT CAGGAATATC CAGGAAGCGA TAGTGAATAC    360

```

CAGGCAGGCT TAAGAGACAG GAAACATTGA GCATGTTGGT AAACCACTTT AGCACATCAG 420
 CAAAAGCATA TAAACAGCTT TAGGATTGGA AATTATTGCC AGGGGGGACT CGAG 474

(2) INFORMATION FOR SEQ ID NO:194:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:

GAATTCGGCC TTCATGGCCT ACGTNNCTAT GTCTTCAAGC ACAGAGGTGT CCAGGTGTAT 60
 TGCACATCTT CATCGCACTG AGCTGCATGG ACAGCTGATT TCTGTGGAAA AAGTATAAGG 120
 TGATCCCTCT CAGAAAGAAA TGAAGAAAGA AAATGATGAA AAGAGTAGTT CAAGAAGTTC 180
 TGGAGATAAA AAAAATACGA GTGATAGAAG TAGCAAGACA CAAGCCTCTG TCAAAAAAGA 240
 AGAGAAAAGA TCGTCTGAGA AATCTGAAAA AAAAGAAAGC AAGGATACTA AGAAAATAGA 300
 AGGTAAAGAT GAGAAGAATG ATAATGGAGC AAGTGGCCAA ACATCAGAAT CGATTAAAAA 360
 AAGTGAAGAA AAGAAGCGAA TAAGTTCCAA GAGTCCAGGA CATATGGTAA TACTAGACCA 420
 AACTAAAGGA GATCATTGTA GACCATCAAG AAGAGGAAGA TATGAGAAAA TTCATGGAAG 480
 AAGTAAGCAA ATGCTCGAG 499

(2) INFORMATION FOR SEQ ID NO:195:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:

GAATTCGGCC TTCATGGCCT AAGCAAAAGA GCATTAAGAA GTGTCTGTTT TTGTTATTGC 60
 CATTTCATAA ATATTTTAGT AGGTGTTCAA TTTCATTGGA TATTCTTTT TTTAATTGT 120
 CTTTGTACCT ATGATTGAAA ACAGTAGTTG GTCTATGACT TTTGAGGAGA GGGAGAACCG 180
 AAGATTACAG GAGGCCAGCA TGAGGTTGGA ACAAGAGAAT GATGACCTTG CCCATGAAC 240
 AGTAACAAGC AAAATTGCTC TACGGAATGA CTTGGATCAG GCAGAAGACA AGGCAGATGT 300
 GTTGAATAAA GAGCTCCTTT TGACCAAAAC CCTCGAG 337

(2) INFORMATION FOR SEQ ID NO:196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:196:

GAATTCGGCT TCATGGCCTA AAGGAACTG ACAAATTATC CCCAGCTGCC AGAAGAAGAA 60
 ATCCTCACTG GACGGCTTCC TGTTCTCTGT GGTTCATTAT CTGATTGGCT GCAGGGATGA 120
 AAGTTTTTAA GTTCATAGGA CTGATGATCC TCCTCACCTC TGCGTTTCA GCCGGTTCAG 180

GACAAAGTCC AATGACTGTG CTGTGCTCCA TAGACTGGTT CATGGTCACA GTGCACCCCT	240
TCATGCTAAA CAACGATGTG TGTGTACACT TTCATGAACT ACACTTGGGC CTGGGTTGCC	300
CCCCAAACCA TGTTCAAGCA CAGCCTACC AGTTCACCTA CCGTGTACT GAATGTGGCA	360
TCAGGGCCAA AGCTGTCATC CTCGAG	386

(2) INFORMATION FOR SEQ ID NO:197:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 429 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:197:

GAATTCGGCC TTCATGGCCT AGTTTTGTG TTTTTTCTT TTTTGGTATT ATTTTGTG	60
CCACTTATTC CTAAAATTCA TATTGCTATT AACCGTACAC ATCTTTCCAT GTTCTTATAA	120
TAATCTACAA ACATCTCTCC CTTTCTGTAG CTCTCTCTGT CACACACACA CACATGCACA	180
CACGCACACA CACACACACA CACACGCTGT GCACTCTCCT GAAGCATGTG TGTACATACA	240
TACATATGTG AGGGGTTTTA TGAAGTTT ACCAAATGT GTTCTTAATA TATACATGT	300
TGGCTTCTTT TTAGCCATTC AGAAGTTATT TCAGTCATGG AATGATCTCT AGCCATATAA	360
CTGAAAACAG GTAAGTTTCT TTCTTGGGA AGAAGGGCGA ATGGTGATAG AGAAAATGGA	420
GAGCTCGAG	429

(2) INFORMATION FOR SEQ ID NO:198:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 349 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:198:

GAATTCGGCC TTCATGGCCT ACCAAGCTAT GCAGGAACAG TTGTCTAAGA ACAAGAAGCT	60
GACACAGAAA CTCCAGGTAG CCTCTGAGAG TGAGGAAGAG GAGGGAGGCA CAGAAGATGT	120
GGAAGAAGCTC CTTGTCCCTG ATGTAGTGAA TGAAGTGCAG ATGAATGCAG ATGGGCCGAA	180
TCCCTGGATG CTCAGGAGCT GCACCAAGAG CACCAAGAG GCTGCAACCC AGGAGGACCC	240
TGAGCAACTG CCAGAGCTTG AGGCCCATGG AGTTTCTGAA AGTGAGGGAG AAGAAAGACC	300
AGTGGCAGAA GAAGAAATT TGTGAGAGA ATTTGAAGAA AGGCTCGAG	349

(2) INFORMATION FOR SEQ ID NO:199:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 312 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:

GAATTCGGCC TTCATGGCCT AGGGAAAGCT CCAACTTGCT TTACCTTTCT AAGATATCCC	60
ATTTTCTCTA TACCATTGT TGAATAAT ATCTCTTGCC CACTGGTTTG TAACAGTGCC	120

```

TTAATTAGTT TTTGTGTTTG AAGTCCAGA ATCTCTTCCT GGCCTATGTA TGTGTGCCG      180
TTGATGGATC TTTCCATCCC ATGGTACCCT TACTATTAT TGTCTTCATT TTTATTACTA      240
TTGTTATGCC CTTTCTCTC TCCGTGCACA TCTTCATGTT TGAACCTAA AAACACACCG      300
CCAACGCTCG AG                                     312

```

(2) INFORMATION FOR SEQ ID NO:200:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:200:

```

GAATTCGGCC TTCATGGCCT AATATATCCA AGTAATAGCA TGTACAGTTT GGTAAGCAAT      60
ATAATAGAGA GATATTCACA GTGAAATAGG AAAGAGCAGT ATAGGTGCAA AGACAAAAG      120
CATGACACAG CTAGATACAG GGCAGCTGTT ATTGGTTTTG TATGGAGAAA ACCTGGAGAA      180
ATGGTGAGAG AAGGGGCAGA AGATGAGAGG GGCCAGATCA TGGAGTACCT GTTTGTGGCG      240
CTCAGGAGTT TAGATGTTAT CATGCAGATA ACTAGGAGCC ATTTGAGGAA CTAAATACA      300
GGAGTGATAC CAGATTTATA TGTTTTTAAA ATGATTACTT GGTGTAATT AAAGAAAAGA      360
TTGGATGATT TAGGCAGATC TCGAG                                     385

```

(2) INFORMATION FOR SEQ ID NO:201:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:

```

AATTCGGCCT TCATGGCCTA CGTTTTTTTA AATTTTTTTA ACTACATATT TGATACGATC      60
TTTTCCTTCT TGCCTTCTTT TTGATTACTT ACTTTCTACC ATTCTATGTT TTTTCGTCAT      120
AGTTTGAAAA TTGTATACTT TGTTTTTATT CTTTCAGTGG TTACCCTAGA AATTACAACA      180
AACAAAAATT GCAACAACCT CGAG                                     204

```

(2) INFORMATION FOR SEQ ID NO:202:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:

```

GAATTCGGCC TTCATGGCCT AAAATCATCA TGCATATTTA TTTCTCCAAA GCACCTTTGA      60
CAAGCATGAT TTGGATAGAG ACTGTGCTTT GTCACCTGAT GAGCTTAAAG ATTTATTTAA      120
AGTTTTCCTT TACATACCTT GGGGGCCAGA TGTGAATAAC ACAGTTTGTG CCAATGAAAG      180
AGGCTGGATA ACCTACCAGG GATTCCTTTC CCAGTGGACG CTCACGACTT ATTTAGATGT      240
ACAGCGGTGC CTGGAATATT TGGCTATCT AGGCTATTCA ATATTGACTG AGCAAGAGTC      300

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TCAAGCTTCA GCTGTTACAG TGACAAGAGA TAAAAAGATA GACCTGCAGA AAAACAAAC	360
TCAAAGAAAT GTGTTTCAGAT GTAATGTAAT TGGAGTGAAA AACTGTGGGA AAAGTGGAGT	420
TCTTCAGGCT CTTCTTGAG AAGACTCGAG	450

(2) INFORMATION FOR SEQ ID NO:203:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 558 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:

GAATTCGGCC TTCATGGCCT AACTGGTTTC TGGCTCGTGG ANTCTGTTTC AAGATCATAT	60
AAGCCGTTGC CATTCCCAAG NAGCGCTGGG ATATGCTCCT TCTCAGATGC TGCTATTTC	120
GTGAAGGTAT TTAATGCTTG TTCAACATTA GATTCTGTT TGGTAGCCAT TAAGCAATAG	180
TTTCCATTA TGCGAANCTG TACGTGACCC TGAACAGTCT GAGGTTTTAG TTCCTTAANA	240
AGTTTTCTG CTGTTCTTAC TGCCAGTTGC ACAGATTCTT GCTTCTCAGT TGAATAACCC	300
AGGTCTCCAT CCAGGTTTTC AAATACTTCA CCTCCAACAG TTTCATTATC TGGATTCAAA	360
CAGATCTCTA TCATATTATA AAGGGCATT TGGCCCCAGT CACGATCTTT CCGAGCTTTA	420
TTAAAATGTC GAAGGGCATC ATTTGGTTCT CCAGTGTACC AAAGATACAG TCCTTTACAA	480
TACTGAAATC CTGGTTCCAA TTTTGCTCTG GAGNNACGTT TCTCAGCCAT TGAGAAAAAT	540
CTTGGGACAT CCCTCGAG	558

(2) INFORMATION FOR SEQ ID NO:204:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 348 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:

GAATTCGGCC TTCATGGCCT ACAAGTAGGG ACTGACTTCT CTAGGTTCTT ACAAGCTCT	60
TCAACCACAC TCATTTCAG CTCTGTCAGA ACAGCATCTG AATTAGGAGG ACTTTGGGAT	120
TCTGGGATAC AGGAAGTATC CAGAGCTTGT GATATAAAAA ACCCTGGGAC AGATATTTTG	180
CAGCCTGAAG AGACCTATAT AGACCCTACT ATGATACAAT CTTTAACTTT TCCTTTGGCC	240
CTTCATAATC AAAGCTCCGA TAAGACAGCT AACATTGTGG AAAACCCATG TCCTGAGATT	300
CTAGGAGTGG ATGTAATATC TAAAGAGACA ACTAGGAGGA AGCTCGAG	348

(2) INFORMATION FOR SEQ ID NO:205:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 292 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:205:

GAATTCGGCC TTCATGGCCT AAGAAAAAAA AGAAGAAAA AAAATGATAC TTTCCAGGTT	60
--	----

CGCTTGGGTC CAGATCTGTA TTCCCAGGGC TCATAGAGAT ATTGGCAAAC TGACAGATTT	120
CATGGCTCAA GAAACCTAAA GACACCTACT TGAATTCCTT TGGTTGGCAG TCAAATGTTA	180
ACTAGTGTGT TTCAAGCTT CTATTCTTAG GCATGTTACT TCCTTTTGA AGTCAAAACC	240
AACCATCTTT TAAGTAAGAG GGCTAACCA ATATGTGCCA CACTAACTCG AG	292

(2) INFORMATION FOR SEQ ID NO:206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:

GAATTCGGCC TTCATGGCCT AAAATATTAA AATCTTTGAA GAAGAAGAAG TTGAATTTAT	60
CAGTGTGCCT GTCCCAGAGT TTGCAGATAG TGATCCTGCC AACATTGTTT ATGACTTTAA	120
CAAGAACTT ACAGCCTATT TAGATCTTAA CCTGGATAAG TGCTATGTGA TCCCTCTGAA	180
CACTTCCATT GTTATGCCAC CCATCTCGAG GCAGGTCTAG	220

(2) INFORMATION FOR SEQ ID NO:207:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

GAAAAAATGG CCAAGGCTAC TGGGAACTA AAGCCAACCT CTAAGATCA GGTATTGGCC	60
ATGCTAGAGA AAGCCAAAGT TAACATGCCA GCCAAGCCTG CTCCACCCAC TAAAGCAACT	120
TCTAAACCAA TGGGAGGGTC CGCTCCAGCC AAATTCCAGC CTGCATCAGC ACCTGCTGAA	180
GATTGTATTT CCAGCAGTAC AGAACCCAAA CCTGATCCAA AAAAGGCCAA AGCTCCAGGA	240
TTATCCTCTA AAGCAAAGAG TGCACAAGGG AAGAAGATGC CAAGCAAAAC CAGCTTAAAG	300
GAGGATGAAG ACAAATCCGG GCCTATACTC GAG	333

(2) INFORMATION FOR SEQ ID NO:208:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:208:

GGAGACAAGT TCTCCTCAGT GAACTGGCAG TACCACTGTG GGCTTACCTG TGAGCACAAG	60
GCCGACCTTC TCCCTATCAG TGCATCCGTC CAGTTTATTA AAATTCCTGC ACAGTTACCC	120
CACCCCTGA CAAGATTCCA GATCAATTAT ACAGAGTATG ACTGCAACAG AAATGAGGTG	180
TGTTGGCCGC AGCTTCTATA TCCATGGACT CAGTATTATC AAGGGGAGCT GCATTCTCAG	240
TGTGTTGCTA AGGGCTTACT GTTGCTGTTG TTCCTCACAT TGGCCTTGTT CCTCAGCAAC	300
CCCCGGACCA CTCGAG	316

(2) INFORMATION FOR SEQ ID NO:209:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 517 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:209:

```

GAATTCGGCC AAAGAGGCCT ATGTCCCTGT CCATCTTAGA GGCTGACCAA GCCCAGCCAT      60
GGGTGGTCCA AATTGCTTAG GTGGTCCCAA TTGCTTGGCT GGCCCAAGAG ATGTCTGGTT      120
CTTAACAATA CAAGAGCCTA TAGAAATTGC TAAAGGGATT TCAGCCACAA CTGAAGCTCA      180
CCAAGAATGA GTTTTCTGGA ACTGGTTAAA GTGTCACAGT AGGGAGTAAG GAAATAAGAA      240
TCCCCACCAA ACATAAGAGA ACAGAATGAT AATAGTCCCT ACTAGTCCAT GACAAGGCTG      300
CCAATTAGGC ATTAAAGCT ATCAAAGATG ATGCTGTGAG GGACCTGGCA ACTTTTGTAA      360
TAGTCTGACT TTAAATGTTT TATTAATGGC CAAGCAGCAA ATATTTTAGG ATTTGTAGGC      420
TATATGGTCT CTGTCCCAAT TACTCCATTC TGCTACTGTA GCATAAAGC AGCGATACAT      480
CCTAAACCGG TCGATTGAAT TCTAGACCTG CCTCGAG      517

```

(2) INFORMATION FOR SEQ ID NO:210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 829 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:210:

```

GAATTCGGCC AAAGAGGCCT AAGAACATGA AACATCTGTG GTTCTTCCTT CTCCTGGTGG      60
CAGCTCCCCG ATGGGTCTCTG TCCCAGGTGC AGCTGCAGGA GTCGGGCCCA GGACTGGTGA      120
AGCCTTCGGA GACCCCTGTCC CTCACCTGCA CTGTCTCTGG TGATTCCATC AGTCATTACT      180
ACTGGACCTG GATCCGGCAG CCCCAGGGC AGGGACTGGA GTGGATTGGA TATTTCTATT      240
CACCCGGGAA CTCCAACTAC AATCCCTCCC TCAAGAGTCG AGTCACCATG TCAGTCGACA      300
CGTCCACGAA CCAGTTCTCC CTAAACTCA NTTCTGTGAC CACTGCGGAC ACGGCCGTCT      360
ATTACTGTGC GAGAGACCTA TATTGCCGTG GGGGAACCTG CTACCCCGCG AGACTTGACC      420
GCTGGGGCCA GGAACCCGG GTCATCTGCT CGTCAGCCTC CACCAAGGGC CCATCGGTCT      480
TCCCCCTGGC ACCCTCCTCC AAGAGCACCT CTGGGGCACA GCGGCCCTGG GCTGCCTGGT      540
CAAGGACTAC TTCCCGAAC CGGTGACGGT GTCGTGGAAT TCAGGCGCCC TGACCAGCGG      600
CGTGACACCC TTCCCGGCTG TCCTACAGTC CTCAGGACTC TACTCCCTCA GCAGCGTGGT      660
GACCGTGCCC TCCAGCAGCT TGGGCACCCA GACCTACATC TGCAACGTGA ATCACAAGCC      720
CAGCAACACC AAGGTGGACA AGAAAGTTGA GCCCAAATCT TGTGACAAA CTCACACATG      780
CCCACCGTGC CCAGCACCTG AACTCCTGGG GGGACCGTCA GTCTTCCTC      829

```

(2) INFORMATION FOR SEQ ID NO:211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:211:

```

GAATTCGGCC AAAGAGGCCT AGTTAATCTG ATAAATTCAC CATCAATTG GTAAGCTTTA      60
ATATAACTAC CCTGTTTTTT GAATACAGAT AATGCAAAAG AAAACCATT TATACTCGGC      120
TATATACCTT CCACCACTCG AG                                              142

```

(2) INFORMATION FOR SEQ ID NO:212:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 555 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:212:

```

GAAATTCGGC CAAAGAGGCC TAGTGAATC ATTCTGCCAC ACCATTTCTT ACTCAAATAG      60
GTACAAACAT ACCACAGACA CTCCCATATA CACATGCTCC TCTATCCGCC AACTCTGGAA      120
CCAAACTAA ATTGGTCTTC AAGAGAGATG ATGGCTTTAA GAACAAAAAT AGCCTTATCC      180
TCTATTTTAC TTGCTGTACT GTTGTACTGT TTATTTAAGA AACAAAGCTGG TGGTTGATGT      240
CCAGGAAAAA TTATCTTTTC AAAATGAGGG AAGAGGAGGT TCACCATGTG GATATGGTGT      300
GCCTTTCAAC ATCCTTAAGG ATTGTTGATA TCATTATTGT TAATCAATTG TTGTCAGCAC      360
AGTGGCTGCC CAAGCTGTGC AAATGAAACA GCCAATCAGC AGGAGAAAGT GATGAAATTA      420
AATGACCTCT TTCCTTAACC ACTCATCCGT AAGCCTTGTT ATTTTTCATA CAAACCTCGA      480
GCCGGGGGAG GAGGGGCGGC GCGAATGCT GGGAGAGTCA GGTCTAGAAT TCAATCGTAG      540
GCCTCTTGG CCGAA                                              555

```

(2) INFORMATION FOR SEQ ID NO:213:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 97 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:213:

```

GAATTCGGCC AAAGAGGCCT ACGAGAAGGG CGGTGTGTAC AAAGGCGAGG GACTTAATCA      60
ACGCAAGCTT ATGACCCGCA CTTACTGGGA ATTCCTC                                              97

```

(2) INFORMATION FOR SEQ ID NO:214:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 487 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:214:

```

GAATTCGGCC AAAGAGGCCT AAGAAGAAAT TGGTAGATTG CGAGAAGAGA TAGAAGAATT      60
AAAACGTAAT CAGGAACCTT TACAAAGCCA GCTGACTGAA AAGGACTCTA TGATTGAAAA      120
TATGAAATCT TCCCAAACAT CTGGCACAAA TGAACAGTCT TCAGCAATAG TTTTCAGCTAG      180
AGATTCTGAA CAAGTTGCAG AATTAAACA GGAAGTGGCA ACTTTAAAGT CTCAGTTAAA      240

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CTCACAATCT GTGGAGATCA CCAAACCTACA GACAGAAAAG CAGGAACTGT TACAGAAAAC 300
AGAAGCGTTT GCAAAATCAG TTGAGGTACA AGGAGAGACC GAGACTATAA TAGCCACCAA 360
AACTACTGAT GTAGAAGGAA GACTGTCAGC ATTATTACAA GAGACCAAAG AGTTAAAGAA 420
TGAAATTAAA GCTCTGTCTG AGGAAAGAAC TGCCATTAAA GAGCAGCTGG ATTCATCTAA 480
TAGTACC 487

```

(2) INFORMATION FOR SEQ ID NO:215:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:215:

```

GAATTCGGCC AAAGAGGCCT ACTGGGCCTT TCAGCACCTG CTCCAGCTTC ACCTTGGTGA 60
ACATCAGGTT GAAGTTCTCA GGGTGCTCGG TGATGGCCAT GTTGACAACA TCCAGGGCAT 120
GCTGGTGGTG CTTCTGGGCA GAGAAGAGCA GTGCCAGCAG GTGGAGGGCG TGGGCATCAT 180
CCTTGCGTAC CTTCAGGGCC TCCTGCAGCT GCTCCATGGC ACTGGAGATC TGTCGGACGA 240
GGGCCAGCTG CAGCGAGACA TAGAGGATGA CCTGGGGGTC ACTGGGCGCC AGCTGCTGAG 300
CCCTCTCCAG CGTCTGCAGT GCCTTCCGGT GCAATTCATC TTGCTTGGAC TTCAGGGTGG 360
CGTCGGTGGC CTGCAGGCTA TAGGTGAGAC CCAGAGCCAG GTAGCCCTTG GGGAGGAACT 420
CCCCGGCTTC CTCTCCGAGG CTGATCACCA TCATGGCAAA GTGCTCTGCT TCCTCTAGCC 480
AGCGAAGGGA CCCGATGCAG ACCTTCGCGG CCATCAGGGG CACGGTGGGG TCCGAGGGCC 540
GCAACTTCAC ACACTCCCGC AGCAGGGACA CAGCGTAGGC TGAC 584

```

(2) INFORMATION FOR SEQ ID NO:216:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:216:

```

GAATTCGGCC AAAGAGGCCT AGACCTGCCC TAAAGATAGA GTCTTGATGC ACCGTCTACC 60
TTGTCCCCAA CCAAGAGTGA GTAGTGCACA GAAGTCTCCT GGCACCCTGG GAATCCTGCA 120
TTTTTAATGG ACGAGCAGGG CAGGAAAGAA AAAAAAACC CAAACCCCAT CACTCTGCCA 180
GCCCCGTGTA CCAAGCAGC CCAAATCAGT TACCTTGACA ACTCTCATGC ACAGACTGCA 240
CCAGCCTGTG TTGCAACAT CACTGCCCGG CTTCTAACAG GAAGAGATAC TCTTTTGGGG 300
GTCTTGCAGG GCCCAGGACC AGAGCCCTT CTACCCAGGG CCCTTCCAAA GGCAAAGCAC 360
AGAGTCACAT TTGGGCGTGG CATGAGAGGG AAATAAAGAG ATTTGGCTGT AGTGGGAGGG 420
AGGTTTCAGT GCTTTTCTG GGGACATTGG TGCCTATCTC TATTCTGAGA GTTGTCTCC 480
TCATAGGACA CCATAAATCG CATCCAGGAC CTGCTGGCTG AGGGTACTCG AG 532

```

(2) INFORMATION FOR SEQ ID NO:217:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:217:

GAATTCGGCC AAAGAGGCCT AGTGTGTCCG GGTCTTATAC AAAACAACA CAGTGAATGA	60
AGGAATAAAT ATTTATTGAA TGGAAATCA GCAAAGGAAA AAATTGTATA ATTGTCAATG	120
ACAATGGGAA GCACATAGTG AGGCTATGAG TGATTGGAA ATCATGAGCG TGCAGTGT	180
TGTTACGCA TTTCTGTTGT GTTTCAGAA AGTAACTACA ACATAGCATC ATGTAGCAGA	240
ATTGCTGGT GTAAGCAAAA AGGCTCGAG	269

(2) INFORMATION FOR SEQ ID NO:218:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 675 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:218:

GAATTCGGCC AAAGAGGCCT AATTCTTTTT CTTTTAATT TGAAGAAAA TCATCAGTCT	60
TGGAATACAG AAGAGAACT AGAAATATAC GTATTTTGT TCACATTTGA ACAGTCATTC	120
TTGAGGAATA CTCCATACCT GAGTAGACAG CCATGTGGCC ATCGCAGCTA CTAATTTCA	180
TGATGCTCTT AGCTCCAATA ATTCATGCTT TCAGCCGTGC CCCAATTCCA ATGGCTGTGG	240
TCCGCAGAGA GCTATCCTGT GAGAGCTATC CTATAGAGCT TCGCTGTCCA GGAACAGACG	300
TCATCATGAT AGAAAGTGCC AACTATGGCA GGACTGATGA CAAAATTTGT GACTCTGACC	360
CTGCTCAGAT GGAGAATATC CGATGTTATC TGCCAGATGC CTATAAGATT ATGTCTCAA	420
GATGCAATAA CAGAACCAG TGTGCAGTGG TGGCAGTCC TGATGTTTTT CCAGACCCGT	480
GTCCAGGAAC CTATAAATAC CTTGAAGTGC AGTATGAATG TGTCCTTAC ATTTTTCTTT	540
GTCCTGGACT ACTAAAAGGA GTATACCAGA GTGAACATTT GTTTGAGTCC GACCACCAAT	600
CTGGGGCGTG GTGCAAAGAC CCTCTGCAG CATCTGACAA GATTATTAT ATGCCCTGGA	660
CTCCCTACAG AACTG	675

(2) INFORMATION FOR SEQ ID NO:219:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:219:

GAATTCGGCC AAAGAGGCCT ACTCCCTGTT TTGAACAAGT TTTTGTGAGA ATTCTTAGTT	60
TTAGTTTTTG TTTAGCTTAC AACTGAAAA TTTTGAGAAG CATCTAAAA AATCCACAAT	120
TAGTGCAAAA AGAGGGGACA ATACTTTAAG TCATTCCTTC TATAAAAAGA ATTAAGGTTA	180
CTAAATGCCA ATTTTAAAGC AAATATATAG TTTCTTATT GCCTTCTGAA AGACAGCAGA	240
TATAAAAATA GTTCAATATT AGGTTTAACA AGGTTTGAAC AACACATGTA CTATCAGCTT	300
TATTTTACCT GCAAAAATAT TTTAGCTACA CTTGGAAAA AATAAACTTG AGAATATAAC	360
TTACATTTTC TAAGGCCAGA TGCAAGAATA CTTATTTAGG CCTCTTTGGC CGAA	414

(2) INFORMATION FOR SEQ ID NO:220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:220:

```

GACCGTCGAT TGAATTCTAG ACCTGCCTCG AGATTGGAGA CAGAAGGTCC CGGGAGCAGA      60
AAGCCAAACA GGAGCGGGAG AAAGAACTGG CAAAAGTCAC TATCAAGAAG GAAACTCGAG      120

```

(2) INFORMATION FOR SEQ ID NO:221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:221:

```

GAATTCGGCC AAAGAGGCCT AAGCAGCAGC TGCTTATATG CATGTGAACA GCTGGGGAAT      60
TAATTGGGTA TGCAATTCTCA GGAGCCACTC ATCTGCTGGC AGAGGTAGCA GAAGAATGCC      120
CTTAGTGTA GTCCTCTACA ACCATACACC AAATGTGCTC CCTGCATTC AAATCCATT      180
GTAGAAAGTC TCTGATAATC TCACTTATAC CATGAGCCAT TCCTCAGTAT CTGTCCTCTT      240
CCTGTTAGTG TTCTACAATT CCTTCTCCT TAATTTTCT CCGCTTTACA AAATGTCACA      300
CAGACAAAGT CATAATACTT AAACAAGCTC GAG      333

```

(2) INFORMATION FOR SEQ ID NO:222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:222:

```

GAATTCGGCC AAAGAGGCCT AAGAAAAGCA CCCTTATTAA GAATTGCAGC AAGTAAGCCA      60
ACAAGGTCTT TTCAGGATGA TTTTCTTATA TCAAGTGGTA CATTTCATT TATTTACTTC      120
AGTTTCTGGT GAATGTGTGA CTCAGTTGTT GAAGGACACC TGCTTTGAAG GAGGGGACAT      180
TACTACGGTC TTCACACCAA GCGCCAAGTA CTGCCAGGTA GTCTGCACTT ACCACCCAAG      240
ATGTTTACTC TTCACTTTCA CGGCGGAATC ACCATCTGAG GATCCCAACC GATGGTTTAC      300
TTGTGTCCTG AAAGACAGTG TTACAGAAAC ACTGCCAAGA GTGAATAGGA CAGCAGCGAT      360
TTCTGGGTAT TCTTTCAAGC AATGCTCACA CCAAATAAGC GCTTGCAACA AAGACATTTA      420
TGTGGACCTA GACATGAAGG GCATAAACTA TAACAGCTCA GTTGCCAAGA GTGCTCAAGA      480
ATGCCAAGAA AGATGCACGG ATGACGTCCA CTGCCACTTT TTCACGTACG CCACAAGGCA      540
GTTTCCAGC CTGGAGCATC GAAATCTTTG TCTCCTTAAA ACATCTGAGA GTGGATTGCC      600
CAGTACACGC ATTAAAAAGA GCAAAGCTCT TTCTGGTTTC AGTCTACAAA GCTGCAGGCA      660
CAGCATCCCA GTGTTCTGCC ATTCTTCATT TTACCATGAC ACTGATTCTT TGGGAGAAGA      720
ACTGGATATT GTTGTGCAA AAAGTCACGA GGCCTGCCAG AAAGTGTGCA CCAATGCCGT      780
CCGCTGCCAG TTTTACCT ATACCCAAC GCTCGAG      817

```

(2) INFORMATION FOR SEQ ID NO:223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 587 base pairs

- (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:223:

```
GAATTCGGCC AAAGAGGCCT AGGAGATACA TCATCATATC ACGGAAAGAG ATGCAGATAG      60
ATCTTTGACC ATACTTGATG AACAGTTATA CTCATTGCGG TTTTCCACCG TGCACATTAC      120
GAAGAAAAGA AATGGAGGTG GGAGTTTAAA TAACTATTCC TCCTCCATTC CATTGACTCC      180
CAGCACCAGC CAGGAGGACC TTTATTTTCAG TGTTCCTCCC ACTGCCAACA CACCCACGCC      240
CGTTTGCAAG CAGTCCATGG GCTGGTCCAA CCTGTTTACA TCTGAGAAAG GGAGTGACCC      300
AGACAAAGGG AGGAAAGCCC TGGAGAGTCA CGCTGACACC ATCGGGAGCG GCAGAGCCAT      360
CCCCATTAAA CAGGGCATGC TCTTAAAGCG AAGTGGGAAA TGGCTGAAGA CGTGGAAAAA      420
GAAATATGTC ACCCTGTGTT CCAATGGCGT GCTCACCTAT TATTCAAGCT TAGGTGATTA      480
TATGAAGAAT ATTCATAAAA AAGAGATTGA CCTTCGGACA TCTACCATCA AAGTCCCAGG      540
AAAGTGGCCA TCCCTAGCCA CATCGGCTG CGCACCCATC TCTCGAG      587
```

(2) INFORMATION FOR SEQ ID NO:224:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 534 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:224:

```
GAATTCGGCC AAAGAGCCTA AGTAGTTGCT GCCTTTCTTC AGATCAGGTT ACCACAATGC      60
CTCCCCGCTG CTGACGCTTC ATCCCCCACA CCTCCAGCCC CAGTTACCTG GAGCTTCTCA      120
GAACCCACTT TGCCGGTGCT AAAACACAAG AGGGGGTGAA AGTGGCTGCC AGTAATGGCC      180
AGAAACCAAC CACCAGAGGC CAGGCTGAAA GACAAGCTCC GGGTGTCCAG GGGCTGACGG      240
GCCAACCATG TGGCAGGTCC CAGGCCCCAC CCACTGCGCC ATCCGTCTCT GAGCTCCACA      300
GTGGTCCAC TAATGGGAAC CTCCTCTAGG GAGAGTGATA CTGCACCTTC ACCCGTAGGA      360
CTCATATTTA TAACAATGTG TAATGGCTGT AGCAAAAAGC CCTTGTTTCT AGATGTAAAT      420
GGTCAAAGAA ACAAGCGCTC TATTGTTTGG AATAAAATAG TTCAAATGAG TCCTGTATCA      480
TTGTATCTCC TATTCTGGAT TAGTGCCTTT TGGACAGTAG ACTGTAACCT CGAG      534
```

(2) INFORMATION FOR SEQ ID NO:225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:225:

```
GCTCCACTCT CTCCCTATCC ATTTGTAAGA ACAGGCTCCC CTCGCCGAAT ACAGTTGTCT      60
CAAAATCATC CTGTCTACAT TTCCCACAT AAAAATGAAA CAATGCTTTC TCCTCGAG      118
```

(2) INFORMATION FOR SEQ ID NO:226:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 582 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:226:

```
GAATTCGGCC AAAGAGGCCT AAATTTTAGT AGAGATGGAA TTTCACCATA TTGGCCAGGC      60
CGGTCTCAAA CTCTTGACCT CAAGTGATCT GCCCGCTCG GCCTCCCAAA ATGTTGAGAT      120
TACAGGCGTG AGCCACCATG CCTCTCTTAC ATTCTTTTCT TCTGTTCACT ACAGCCGTGG      180
AGAGCTCCGG GTTGTCCTGC ACATGTGCAC TGCCCTCTCT TTTATGGACC TTTTAGGCTG      240
GCTGCACCCT CCGTCTGTGT CACCCTCCTG CTCCTCCTCC ACCTGGCTAG TTCCTGTTGG      300
CCACTTTTGG AAATTCATGC CAGTCCAGTC CACCCTGAGT ACATCCTCTT TCTGTGTCAC      360
TGAGCTCACT ATGCTGGGTT TTATCTATGT CTCCCTCGCA ACTAGATCAT TCACGCTCTG      420
AAGTTAGGCA TCATGCGTTC TTCATTTCTG TACCTCCCAA CTCAATGCTT AGCACCCAGC      480
AGGGGCTCAA GACTGTGTGT GGAATGAAGG ATTCGTGTGA AAATGCAGGG AGATGGAAGG      540
CTGAGCGTTT CTGTTCTTGG ACCATTCCCG GGTGGCTCG AG                          582
```

(2) INFORMATION FOR SEQ ID NO:227:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 461 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:227:

```
GAATTCGGCC AAAGAGGCCT AAAAATTAT AAATAAGTGA GACTACTGCC CCCTAGCCTA      60
AAATTCATTC CCTGCGCTCA CTCAACATCA TAGTTCITTA GGAAGACAAG TTGTTCTATA      120
GCATAAAGAT ACAACCTATT TAGATAGTCT AAAGATTCTC CTCTGTTTCT CAAATACAGT      180
CAGTTATGCA GCTCAAAATG CCTCTCATT TCCTGCTTTT TTTTCTTCTA CTATTGTGTC      240
CTCCAGGCTT TGCAGAAACA CATGTTATTC TCCCCCTAAA ATCTGTTCTT CTCTAGTTT      300
TCTCTCTGCC AGCAATGGCA CCACACAGTC TTTTGGTTTT GCACCAGAGA ATTAGAGATG      360
AACCCCTCAT CTCTAATCTA TCACAAGTTT CCTCAGATT AAACCTCTCA ATCAAGATGT      420
TTCTACCAT TTCCATTACT ATTGTCCCCA GCTTTCTCGA G                          461
```

(2) INFORMATION FOR SEQ ID NO:228:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 133 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:228:

```
GCCTAAACCG TCGATTGAAT TCTAGACCTA TCTCGAGAAA GAGTTGTTCT GGAAAGAAAT      60
GAAGAAAAGA GCAGAACCAA TCTCAAGCAG CCAAGTGGTG AAGTTGGATG TATGTGACCC      120
TACGTCTCTC GAG                          133
```

(2) INFORMATION FOR SEQ ID NO:229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:229:

```

GAAAGGGATC AAAAAGAAAA AGTGATCGAA TGGAACTCTAC TGATACCAAA CGACAAAAGC      60
CTTCTGTCCA TTCAAGACAA CTGGTTTCTA AGCCACTGAG CTCATCTGTT AGCAATAACA      120
AAAGAATAGT TAGTACAAAA GGAAAGTCAG CCACAGAGTA TAAAAATGAG GAATATCAAA      180
GATCTGAAAG AAACAAGCGT CTAGATGCTG ATCGGAAAAT TCGTCTATCA AGTAGTGCCT      240
CCAGAGAACC TTATAAGAAT CAACCTGAAA AAACCTGTGT CCGGAAAAGG GATCCTGAAA      300
GGAGGGCCAA ATCTCCTACG CCAGATGGTT CTGAGAGAAT TGGGCTTGAA GTGGATAGAC      360
GTGCAAGCAG ATCCAGCCAG TCTTCTAAGG AAGAAGTGAA CTCTGAAGAA TATGGCTCTG      420
ACCATGAGAC TGGCAGCAGT GGTTCCTCTG ATGAGCAAGG GAACAACACT GAAATCTCG      480
AG                                                                                   482

```

(2) INFORMATION FOR SEQ ID NO:230:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:230:

```

GAATTCGGCC TTCATGGCCT AGGGGATAAA TGTAAGCTTG TTAAAGTAAG CACCACACCA      60
TGTTTCTGTC TCCCAGCAC CCAGCACAGT GCTGTGAACC TTGGCAGATG CTAGATAAAT      120
GTGTGTTGAA TGAATGTGCC TATGAAGCCA CAAAGATGCC ACATGTTAGT ATATCAGTGA      180
GAGGTGACTC CACAGTGCTC TCTGGAGAAG CAATATGAGT GACTGAAGAG TGGGGCCTTT      240
TGCTTTTGCC TGGATATAGG GGTGCTCTTC TACTGTAATT GGGTGTGGAA AAACCTCTGC      300
TTTATGGTAT TCCATAGGT TCTTTTCATT TAAAGTAGTC TTAAATCAA AGTATCCAAT      360
ATTTTAAAGC CACAAAGTAG ATTACATAAT TAGCAGAGAT TTAGTCAGT AAAATGTTAG      420
AAATCAAAC ATAAGAAAT TCAAGTCCTT TATTTGTGT CTTGGGTATA TGTCAATTATT      480
TTAAATTCCA CAGCTCTCGA G                                                                                   501

```

(2) INFORMATION FOR SEQ ID NO:231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:231:

```

GAATTCGGCT TCGATTGAAT TCTAGGACTT GACAGAATTC GAGTTATCCT TCTCAGAACA      60
TGTGCAGAGT CTCTTTTTC CTCACCATGT GGTCTGTGTC TCTTTCAGGT GGGAGTTTTC      120
GGGCTCCAG GGCAGCAGGC ACCACCTCCA TATCCCGGCC CACATCCAGC TGGACCCCCT      180
GTCATACAGC AGCCAACAAC ACCCATGTTT GTAGCTCCCC CCCAAAGACC CAGCGGCTTC      240
TTCACCTCAGA GGCCTACCTG AAATACATTG AAGGACTCAG TCGCGAGTCC AACAGCATTAA      300

```

GCAAGTGGGA TCAGAGCAAT CTCGAG

326

(2) INFORMATION FOR SEQ ID NO:232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:232:

```

GAATTCGGCC TTCATGGCCT AATCAGAAGC TTTTCAAAT TCCGTCTTCA AGAAGAAACA      60
CCCGTGGAGG AAGAAGACAT TATACAAAAC AAATTTAGAA ACTGGGATCA TGAGTGAAAA      120
AACAAAGGCA AGAAGGGCTG CCATGTTTTT TAGACGTTGC TCTGAAGACG CCAGCGGTAG      180
CGCCAGTGGC AATJCTTTGT TATCAGAGGA CGAAAATCCT GATGCGAATG GGGTAACTCG      240
ATCATGGAAG ATTATTCTAA GTACAATGCT TACACTGACT TTTCTTCTTG TAGGACTCCT      300
AAATCATCAG TGGCTTAAAG AACAGATGT TCCTCAGAAA TCCAGACAAT TATATGCCAT      360
GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:233:

```

GAATTCGGCC TTCATGGCCT AAAGAAGAAT TGACACCTCT TGGAGTCCAC TTGGCAGCAT      60
TACCCGTTGA GCCACATATT GGAAAAATGA TTCTTTTGG AGCACTGTTC TGCTGCTTAG      120
ACCCAGTACT CACTATTGCT GCTAGTCTCA GTTTCAAAGA TCCATTGTGC ATTCCACTGG      180
GAAAAGAAAA GATTGCAGAT GCAAGAAGAA AGGAATTGGC AAAGGATACT AGAAGTGATC      240
ACTTAACAGT TGTGAATGCG TTTGAGGGCT GGAAGAGGC TAGGCGACGT GGTTCAGAT      300
ACGAAAAGGA CACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:234:

```

GAATTCGGCT TCATGGCCTA CGATGAGGCT GCTGTCATTT GTGGTGTGG CTCTATTGTC      60
TGTCACCTCA GCAGAGGAAG GAGCCAGGCT TTTGGCTTCC AAATCACTGC TGAACAGATA      120
CGCCGTGGAG GGACGAGACC TGACCTTGCA GTACAACATC TACAATGTTG GCTCAAGTGC      180
TGCAATAGAC GTGGAACAT CTGATGATTC CTTCCCTCCA GAAGACTTTG GCATTGTGTC      240
TGGAATGCTC AATGTCAAAT GGGACCGGAT TGCCCTGCT AGCAATGTCT CCCACACTGT      300
GGTCCTGCGC CCTCTCAAGG CTGGTTATTT CAACTTCACC TCGGCAACAA TCCTCGAG      358

```

(2) INFORMATION FOR SEQ ID NO:235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:235:

```

GAATTCGGCT TCATGGCCTA GTTGTACGTA ATGTATTTAT ATGTTAATTT GTTATGTATA      60
TAGATGTGCA AGTCTTGTC A GAATTGGCCT CAGTG TAGTT AAAGGGCAGA AGGGAAGAT      120
ACTGACTAGT CATAGAAATA CCTCATTCGC CTGTGGGAAG AGAAGGGAAG CCTCTTCAGG      180
GTGAGTGAAT GGCAAAGCGG TTGCTTCTGG CTCCTCCTTC CCCTGTGTC TTGGAAGTGT      240
GTGGAAGGCA GGGACAGAGA TGGAGGCCGA GCCAATAGAC TGAAGAGACC ACAGCAATTG      300
GCTCCTCCAT CTAGAGATTT TCTTGGCAGT ATTCCATGGG ATGTTAAGCA AAGGAAACCA      360
AAGGAATCGT TTCAAATGGA CTCATGGCTT AGAAATCTTT ATTCTTAGGG CAGTCAGTAG      420
TATTCTAAG CTTTCTGACA AGATAAAGGA AGTCACCAA ATTTCTTTT TTAATTTGTA      480
TCTAATCCTC AACACAAAC CAAACTCTC GAG                                     513

```

(2) INFORMATION FOR SEQ ID NO:236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:236:

```

GAATTCGGCC TTCATGGCCT ACTTGGAAT GTTTGATGCT ACTCTGAAAG ATCGAGAACT      60
GAGCTTTTCAG TCGGCTCCAG GTACTACCAT GTTTCGTCAT TGGCTAGTGG GAATGGTATA      120
TGTCTTCTAC TTTGCCTCCT TCATTCTACT ACTGAGAGAG GTACTTCGAC CTGGTGTCTC      180
GTGTTTCTA AGGAATTGA ATGATCCAGA TTTCAATCCA GTACAGGAAA TGATCCATTT      240
GCCAATATAT AGGCATCTCC GAAGATTAT TTTGTCTAGT ATTGTCTTTG GCTCCATTGT      300
CCTCCTGATG CTTTGGCTTC CTATACGTAT AATTAAGAGT GTGCTGCCTA ATTTTCTTCC      360
ATACAATGTC ATGCTCTACA GTGATGCTCC AGTGAGTGAA CTGTCCCTCG AG          412

```

(2) INFORMATION FOR SEQ ID NO:237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:237:

```

TTCATGGCCT AGAGATATGC TTCTTTGTAC CAATATGGAA AATCTAAAAG AAAAAACCCA      60
CACTCAGCAC TATGAATGTT ATAGGTACCA AAAACTGCAG AAAATGGGCT TTACAGATGT      120
GGGTCCAAAC AACCAGCCAG TTAGTTTTC AAGAAATCTTT GAAGCCAAAA GACAAGAGTT      180
CTATGATCAA TGTGAGAGGG AAGAAGAAGA GTTGAAACAG AGATTTATGC AGCGAGTCAA      240
GGAGAAAGAA GCAACATTTA AAGAAGCTGA AAAAGAGCTG CAGGACAAGT TCGAGCATCT      300

```


TAAATGATT CAACAGGAGG AGATAAGGAA GCTCGAG

337

(2) INFORMATION FOR SEQ ID NO:238:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 750 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:238:

```

GAATTCGCGC ATTCTGGTACA ACAAGAGAGA TAAACGATGA AACCGTTACA TTATACAGCT      60
TCAGCACTGG CGCTCGGACT GCGGTTAATG GGAATGCAC AGGCAGTGAC GACCATTCGG      120
TTCTGGCATT CTATGGAAGG GGAAGTGGGT AAAGAGGTGG ATTCTCTGGC CCAACGTTTT      180
AACGCCGAAA ACCCGGATTA' CAAAATTGTA CCGACCTATA AAGGCAACTA CGAACAGAAT      240
TTAAGCGCGG GGATTGCCGC ATTTCTGTACC GGCAACGCGC CCGCTATTTT GCAGGTTTAT      300
GAAGTTGGCA CCGCCACCAT GATGGCGTCG AAAGCCATTA AACCGGTGTA TGACGTGTTT      360
AAAGAGGCAG GGATTCAGTT CGATGAGTCG CAGTTTGTGC CGACGGTTTC AGGTTACTAC      420
TCCGACAGCA AAACGGGCCA CTTACTCTCC CAGCCATTCA ACAGCTCGAC CCCCGTTCTC      480
TATTACAACA AAGACGCCCT CAAGAAAGCA GGATTAGACC CGGAACAGCC GCCGAAAACC      540
TGGCAGGATC TGGCGGACTA TGCCGCGAAA CTGAAAGCCT CCGGCATGAA GTGCGGCTAC      600
GCCAGCGGCT GGCAGGGCTG GATCCAAC TGAAACTTTA GCGCCTGGAA CCGTCTGCCG      660
TTTGCCAGCA AAAACAACGG CTTTGACGGC ACGGACGCGG TGCTGGAGTT CAATAAGCCG      720
GAGCAGGTGA AACACATCGC CATGCTCGAG      750

```

(2) INFORMATION FOR SEQ ID NO:239:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:239:

```

GAATTCGGCC TTCATGGCCT ACTTACAGAA CCTATTCACT GGAAGGAAG CCCTCATTAT      60
AATGATTTTC ATTCTTATGT GTGTTTCAGG ACGACTGGGT TTGGATTGAG AAGAGGATTA      120
TTATACACCA CAAAAGGTGG ATGTTCCCAA GGCCTTGATT ATTGTTGCAG TTCAATGTGG      180
CTGTGATGGG ACATTTCTGT TGACCCAGTC AGGCAAAGTG CTGGCCTGTG GACTCAATGA      240
ATTCAATAAG CTGGGTCTGA ATCAGTGCAAT GTCGGGAATT ATCAACCATG AAGCATACCA      300
TGAAGTTCCC TACACAACGT CCTTACCTT. GGCCAAACAG TTGTCTTTT ATAAGATCCG      360
TACCATTGCC CCAGGCAAGA CTCACACAGC TGCTATTGAT GAGCGAGGCC GGCTGCTGAC      420
CTTTGGCTGC AACAAAGTGTG GGCAGCTGGG CGTTGGGAAC TACAAGAAGC GTCTGGGAAT      480
CAACCTCGAG      490

```

(2) INFORMATION FOR SEQ ID NO:240:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:240:

```

GAATTCGGCC TTCATGGCCT ACTTCTGGAC TCTATAGAAC CCACTGCCTC CTGATGAAGT      60
CCCTACTGTT CACCCCTGCA GTTTTATGTC TCCTGGCCCA ATTGGTCTCA GGTAATTGGT      120
ATGTGAAAAA GTGTCTAAAC GACGTTGGAA TTTGCAAGAA GAAGTGCAAA CCTGAAGAGA      180
TGCATGTAAA GAATGGTTGG GCAATGTGCG GCAAACAAAG GGACTGCTGT GTTCCAGCTG      240
ACAGACGTGC TAATTATCCT GTTTTCTGTG TCCAGACAAA GACTACAAGA ATTTCAACAG      300
TAACAGCAAC AACAGCAACA ACAACTTTGA TGATGACTAC TGCTTCGATG TCTTCGATGG      360
CTCCTACCCG TTTCTCCAC TGGTTGAACA TTCCAGCCTC TGTCTCCTGC TCTAGGATCC      420
TCGAG                                         425

```

(2) INFORMATION FOR SEQ ID NO:241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:241:

```

GAATTCGGCC TTCATGGCCT AACCAGAACT AATTTGCTAA GTCTTTTGTG TAGTCCTGCA      60
AGACTGATGC TTAATACACA GTCTGTTCTC CTGTGTCTAG GTCAGGAAGT CCAGTTTGCT      120
TTTCTGTTTT GTGTCCTGGT AGCAGCTGTT GAGTAACTTT CATGGAGGT TGGGAAGGAA      180
GTGAGGAGAA AGTGTCTTGT TTTAGTGTGTT TATTTCTAT AATAGGATGC TGCCTAACCC      240
AGTTCATCTC TATGTCCTGT TCACTGAATA TTCCGGGTAA TTGAAAGAAA ATATAATGGA      300
TGGGCTCCAT TAAAACAGC TCAAAAATAA ATTCTTGTCG GTAAAGATTT CTTGTCAAGA      360
TGTCTTGAT TGCACTTTGT TTGAGGAAAG ACAGTGATAA TAGTTAAAGA ATGTTGATAA      420
AATTGAAACA TTTGGTTGTG GAATTGTGTG TGGTACTCGA G                                         461

```

(2) INFORMATION FOR SEQ ID NO:242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 508 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:242:

```

GAATTCGGCC TTCATGGCTT ATGGACAAGG AAGCATTGAG AGCATGGTGT CATCTGACTC      60
CACATCACCA GATTCTTCTT TAACAGAAGA ATCACGTCTT GAGACAGCCA GTAGTTTATC      120
CCAGAAGATT TGTAAATGGG GATTATCTCC TGGTAACCCA GGAGATTCTA AGGACATGAA      180
GGAAATTGAG CCAATTATG AAAGTCCCTC TAGTAATAAT CAGGATAAAG ATTCATCACA      240
GGCTTCCAAA AGCTCAATAA AAGTTCCAGA GACCCACAAA GCAGTCCTTG CTCTCCGATT      300
AGAAGAGAAA GATGGCAAGA TTGCTGTACA AACTGAGAAG GAAGAAAGTA AAGCCTCTAC      360
AGATGTTGCT GGGCAAGCAG TAACCATAAA CCTTGTCCTC ACAGAAGAGC AAGCAAAACC      420
TTACCGAGTT GTGAACCTGG AACAGCCATT GTGCAAGCCA TATACTGTCT TGGATGTGTC      480
AGCAGCCATG GCCAGTGAGC ACCTCGAG                                         508

```

(2) INFORMATION FOR SEQ ID NO:243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:243:

GAATTCGGCT	TCATGGCCTA	GGTTTCTGT	ACATGGAGAT	TAACTGTCT	TCCAAAGTGA	60
AGAGTTTATT	GTTCTAGATC	TTGAGCACAA	AGGTTGGTAT	ACGTTAATAA	AAAAAATAGC	120
AAGGGAAGAA	AATCATTTCC	TTCATACCAA	GTAAGAGAGC	ACTTATCATG	GTAGGCACTG	180
GCTTTGCAAT	TATGAGACCA	GTAAGAGAAA	TAGCTTTAGT	TTCCTCAATT	TTCTGGAGT	240
ATTCTTCAGA	CTTTCTTTAC	ACTGCTCAAG	GTGGGGCGAG	TGGCAGGGCG	GACCTGGCG	300
ACCTGACGCT	GCGGAGGCTC	GAG				323

(2) INFORMATION FOR SEQ ID NO:244:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 396 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:244:

GAATTCGGCC	TTCATGGCCT	AGCTTCAGTA	GCAAATAAGG	ACATCATCTG	CTATAACCTA	60
CAAGCAGTTG	GACAGATATT	CTACATTTCC	TCATTTCTCT	ACACCGTCAA	TTACATCTGG	120
TATTTGTACA	CAGAGCTGAG	GATGAAACAC	ACCCAGAGTG	GACAGAGCAC	ATTCCTACTG	180
GTGATAGATT	ATACTTGTCT	AGTTGGTCAA	ATGGCCTTTG	TTTTCTCAAG	CCTGATACCT	240
CTGCTATTGA	TGACACCTGT	ATTCTGTCTG	GGAAATACTA	GTGAATGTTT	CCAAAAGTTC	300
AGTCAGAGCC	ACAAGTGTAT	CTTGATGCAC	TCACCACCAT	CAGCCATGGC	TGAACTTCCA	360
CCTTCTGCCA	ACACATCTGT	CTGTAGCACA	CTCGAG			396

(2) INFORMATION FOR SEQ ID NO:245:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 370 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:245:

GAATTCGGCC	TTCATGCTTA	GCCTCAGCTC	TTTCTTCTGG	GTGTTTGTGA	TTTCTTTTC	60
TGTCCCAAAC	AGTTTCCCCC	ACAAAAGAA	CTTTATGTCT	TTCTCTGTCT	TCCCTCAGTC	120
CTTCCAGTCA	GCAGCTGTG	ATTGGGCTTT	TCCCCTCAGA	AACGAACAAT	CCAGAACCCA	180
CTGTTTAAAA	CAACTGTATT	TTGCCTTGGG	AAGTCCCAT	GCCTTCCCTG	AAAACATTAA	240
ACATTCTCTC	GATCCCAGC	CTGAGTCTCT	CTGTCTCTGG	GCCCCATCCT	GCTCCACAGC	300
AGGGCTGGTG	TGTCCAGCAC	AGAGTGACCC	TCCGATGCC	TTCCCAACC	GCCGCCCTGC	360
CTCCCTCGAG						370

(2) INFORMATION FOR SEQ ID NO:246:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 367 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:246:

```
GAATTCGGCC TTCATGCCTA GAGAACTTGA AGCTTTGCGG CAGGAATTTA AAAAGAAAGA      60
CAAGACGTTG AAAGAGAATT CCAGAAAGTT GGAGGAAGAA AATGAGAATC TCCGAGCAGA      120
GCTACAGTGT TGTTCTACAC AACTGGAATC CTCTCTCAAC AAATACAACA CCAGCCAGCA      180
AGTCATCCAA GACTTGAATA AAGAGATAGC CCTTCAGAAAG GAGTCCTTAA TGAGCCTGCA      240
GGCCCAGCTG GACAAAGCTC TGCAGAAGGA GAAGCACTAT CTCCAGACTA CCATCACCAA      300
AGAAGCCTAT GATGCATTAT CCCGGAAGTC AGCCGCCTGC CAGGATGACC TGACACAAGC      360
CCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:247:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 450 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:247:

```
GAATTCGGCC TTCATGGCCT ACGGCTTCAT AGTAACTCTT TGCCATATCT CTAGCCAGCT      60
GCATAAAACG TTCGCCATCA GATGGAGACA AAAGGTTTAA AATACGCCTA TAACCATCCA      120
TGGCCATTTT ATGATCACCC ATCTGTTTCAT AAAGGCTTGA TCGCTCCAC AGATAACGGA      180
CATTAGTAGG TTCATATTTA AGAGCTTTTG TATAGCAAAA AATAGCCTGC TTAATATTGT      240
CTTGTTCCAG AGACATTTCT GCCAGTCTAA CCCATTCTTC TGTGTCAGTG GGATTITAAAT      300
GCGCAGCAAT CAACTCAAAC TGCAATGATT TTTCCATGTC ACCTTGGTCC TCATATATCA      360
TGGCTAGAGT AGAGAATGGC TCATAAGCCA GAGGAGCTTG TCTTATGATT TCCATGCACA      420
TCAATATCGC CTCTTCACGT TCTCCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:248:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 408 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:248:

```
GAATTCGGCC TTCATGGCCT AACGAAACTG ACGTCTACCT CATGGGGCTG CTGTGTGGGT      60
TTGGGAGGCA AAAATCTATG AAGGGTTTTT TGAAATCCCA TAGGTGCCAC ATCTATGAGA      120
TGTTTGATAA ATGTGAATAT GCITTTACAT TTGGGCTTAT CTAATTTGCA ATAAGAGAGC      180
CTCTCTCTAT CAACACCAGC TTCTCTCTCG GGCTGTTTGC TCAGGGAAGG CAAGAAAGCC      240
ACGTGCTGGC CCTCTGCCTT CTCTAAAGTG CTGTTGGAGC ATGGAGGAGC TGGAGGAGAT      300
GGGGATGGAC TGACAGCTAA GAGGGCGGCT GCTGGGACTA GATAGTGGAT GAAGAAAGAA      360
GGACGAGGAA GCCGTGGGGC AGCCTCTTCA CATGGGGACG AACTCGAG
```

(2) INFORMATION FOR SEQ ID NO:249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:249:

```

GCCCCATGACA GAGAGCAGTG CCAAAGACAT GGCCTACGAA CATCTGATAG ATGACTTATT      60
GGCTGCTCAG AAGGAAATTC TGTCTCAGCA GGAAGTCATC ATGAAGTTAA GGAAAGACCT      120
TACCGAAGCC CACAGCAGAA TGTCGGATTT GAGAGGGGAG CTAAACGAGA AGCAGAAGAT      180
GGAAGTGGAG CAGAACGTGG TGCTGGTCCA GCAGCAGAGC AAGGAGCTGA GTGTGCTCAA      240
GGAGAAGATG GCCCAGATGA GCAGCCTGGT AGAAAAGAAA GATCGGGAGC TGAAGGCCCT      300
TGAGGAGGCA CTCAGGGCTT CCCAAGAGAA ACACAGACTC CAGCTGAACA CAGAGAAGGA      360
ACAGAAGCCC CGGAAGAAGA CCCAGACGTG TGACACCTCT GTGCAGATAG AACCCGTCCA      420
CACTGAGGCC TTCTCCAGCA GCCAAGAGCA GCAATCCTTC AGCGATCTAG GGGTCAGGTG      480
CAAAGGGTCC CGGCACGAGG AGGTCATTCA GCGTCAGAAA AAGGCCTTAT CTGAACCTCG      540
AGCGCGAATT AAAGAACTCG AG                                         562

```

(2) INFORMATION FOR SEQ ID NO:250:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:250:

```

GAATTCGGCC TTCATGGCCT ACCCAAACAG ACAGAAAACG CCACGAGGCA AGTGTAGTCT      60
CTCACAGCCT GGACCTCTG TCAGCAGTCC ACATAGCAGG TCCACAAAAG GTGGCTCCGA      120
TTCCTCCCTT TCTGAGCCAG GGCCAGGTGG GTCCGGCCGC GGCTTCCTGT TCAGAGTCCT      180
CCGAGCAGCT CTTCCTCTTC AGCTTCTCCT GCTCCTCCTC ATCGGGCTTG CCTGCCTTGT      240
ACCAATGTCA GAGGAAGACT ACAGCTGTGC CCTCTCCAAC AACTTTGCCC GGTCAATTCCA      300
CCCTATGCTC GAG                                         313

```

(2) INFORMATION FOR SEQ ID NO:251:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:251:

```

GTCTTGACAA AACCTAACTT GCGCAGAAAA CAAGATGAGA TTGGCATGGC TTTATTTGTT      60
TTTTTTGTTT TGTTTTGTTT TTTTITTTTT TTTTGGCTTG ACTCAGGAGA TCCCTCCCCG      120
GGGCTCCCGC CGGCTTCTCC GGGATCGGTC GCGTTACCGC ACTGGACGCC TCGCGGCGCC      180
CATTTCGGCC ACTCCGGATT CGGGGATCTG AACCCGACTC CCTTTCGATC GGCCGAGGGC      240
AACGGAGGCC ATCGCCCGTC CCTTCGGAAC GGCGCTCGCC CAACTCTCGA G                                         291

```

(2) INFORMATION FOR SEQ ID NO:252:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 384 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:252:

```
CGGGAAATGA AGCGGAAGCA GCGGAGTCC GAGAGGCCCA TCTTGCCAGC CAATCAGAAG      60
CTCATTACTT TATCAGTGCA AGATGCACCC ACAAAGAAAG AGTTTGTTAT TAACCCCAAC      120
GGGAAATCCG AGGTCTGCAT CCTGCACGAG TACATGCAGC GTGTCCTCAA GGTCCGCCCT      180
GTCTATAATT TCTTTGAATG TGAGAACCCA AGTGAGCCTT TTGGTGCCCTC GGTGACCATT      240
GATGGTGTGA CTTACGGATC TGGAAGTCCA AGCAGCAAAA AACTTGCAGAA GAATAAAGCT      300
GCCCCGAGTA CACTGGAAT CCTCATCCCT GACTTTGTTA AACAGACCTC TGAAGAGAAG      360
CCCAAGACA GTGAAGAACT CGAG                                         384
```

(2) INFORMATION FOR SEQ ID NO:253:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 276 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:253:

```
GGGACGTTGG TGTGAGGTT GGCATACGTA TCAAGGACAG TAACTACCAT GGCTCCCGAA      60
GTTTGGCCAA AACCTCGGAT GCGTGGCCTT CTGGCCAGGC GTCTGCGAAA TCATATGGCT      120
GTAGCATTCG TGCTATCCCT GGGGGTTGCA GCTTTGTATA AGTTTCGTGT GGCTGATCAA      180
AGAAAGAAGG CATACGCAGA TTTCTACAGA AACTATGATG TCATGAAAGA TTTTGAGGAG      240
ATGAGGAAGG CTGGTATCTT TCAGAGTGTA CTCGAG                                         276
```

(2) INFORMATION FOR SEQ ID NO:254:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 497 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:254:

```
GAGTTTGTTG GGCTTACCTT ATTTTAATTA AAAAGAAGTC GGGGCTACCA GGGGTTTCAG      60
ACGTGCTCGA TGGACACGTG ATTTGTAAAC AGCCAAGATT CTGGGGGACG GGGGGGTGCC      120
TCGGTGGGGT TGACATTGGA GTTACAGGGA CTTAATAATG GCCAGCCTTT CACATCCCAT      180
GGGAAACCGC CCCCCCGGGC CTTGGAGAAT GGGGGTCCAA GTGCCTATCC CCCTTTGGAT      240
GTAAAATTCA TCGTTAGTAA ACATCATCCG CCCAGCAACA AGCAAAGCAC ATCGCAAGAT      300
TAAACAAAG AATCCGCCGT GAACAGAAGG CCTCCATCTC TGCTCTCAGG CAGGTGTCCT      360
TCAGGGAGGA GCCTCAGGCA GCTGTTCTAA CCCTGCTGCC AACGCCTGGG CTGTTTCTGC      420
CGACAATCTT CTATTTCTCT AAAAGAGTAC GCTGAACAGC TGGCTCTGCG TTGATTGAAT      480
TCTAGACCTG CCTCGAG                                         497
```

(2) INFORMATION FOR SEQ ID NO:255:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 470 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:255:

```
GAATTCGGCC TTCATGGCCT AGAGAACCGT TGCTTTTCCG AGTTGCTCTT CTTCAGGCT      60
CCGTTGGTGG TCGGCATGGC CCGTGGAAT CAACGAGAAC TTGCCCGCCA GAAAAACATG      120
AAGAAAACCC AGGAAATTAG CAAGGGAAAG AGGAAAGAGG ATAGCTTGAC TGCTCTCAG      180
AGAAAGCAGA GGGACTCTGA GATCATGCAA GAAAAGCAGA AGGCAGCTAA TGAGAAGAAG      240
TCTATGCAGA CAAGAGAAAA GTGATGACTG GCTATTTGGA AAACCTGGGT GCTACTGCCA      300
ACTGGGTGTA TCATAAGCTC TAAGATCAAG ATTTTGTAGA GTGGACAGTC ATTACATATG      360
TTATAACTTA TCCTTTAAAA ACTATTTTAA ACTTTATCCT TTCAGCTTTA CTTAGTGCGA      420
TGTTTTAGAA GCAGTCTTCA AAGAATAAAA CACTAACCAT GCTGCTCGAG      470
```

(2) INFORMATION FOR SEQ ID NO:256:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 388 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:256:

```
GAATTCGGCC TTCATGGCCT AATTTTGTAT TTTTAGTGGA GACGGGGTTT CTCCATGTTG      60
GTCAAGCTGG TCTTGAAGTC CCAACCTCGG GTGATCCGCC CGCCTTGCC TCCCAAAGTG      120
CTGGGATTAC AGGCGTGAGC CACCGCGCCT GGCCAGTAGT TTCTTAACAT TAAATTATCC      180
GCAAAATGGA AGAAATACTA GAGGTCTGTG AGGATGTTTC TTCTCTTCA GCTCTGTTGTG      240
GTGGTTTGTA GTTTACAGGG GCTTGGGTAA CTGGATTTT AGGTTTATTA TTTTAAATAG      300
TAGACTCAAC ACTATTTTGT ATTGCAGTAG AGATCACTTA TGCAGATCTT TTTAATACCA      360
TTTCATAGAG ATTAAGGGTC ACCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:257:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 333 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:257:

```
GAAACAGGGC TCAAAGAAGT GGTAAGTCT GTGGAGGAAA TGACAAGTAA AGGAAAACCA      60
GGACAAGAAG TCTTGGAAGA CGACCAGGAA AATACTTTAA AATATGAGTA TGAAGAAGAC      120
TTTGAAGTAG ATGAGGAGAA ACAAGGTGAA AAATCTAATG AAGAAGGACA GGCTGATGTT      180
CAAATGAATG GAATACCGCA GTCACCTTTG GATGATAAAA AAGATAATTT AGACCCTGAA      240
AAAGAGAGTG AAACCTCATC ACAGAAGGCA CCAGATGCCC GTGACATGT GAAAGATGAG      300
AATGATGGAT GCTCTGAGAG TGAACGTCTC GAG
```

(2) INFORMATION FOR SEQ ID NO:258:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:258:

```

CACAGTGCTG GNTCACAACA AGATGNTCNA GGTGTCAGCC GTACTGTGTG TGTGTGCAGC      60
CGCTTGGTGC AGTCAGTCTC TCGCAGCTGC CGCGGCGGTG GCTGCAGCCG GGGGGCGGTC      120
GGACGGCGGT AATTTTCTGG ATGATAAACA ATGGGTCACC ACAATCTCTC AGTATGACAA      180
GGAAGTCGGA CAGTGAACA AATCCGAGA CGATGATTAT TTCGCACTT GGAGTCCAGG      240
AAAACCCTTC GATCAGGCTT TAGATCCAGC TAAGGATCCA TGCTTAAAGA TGAAATGTAG      300
TCGCCATAAA GTATGCATTG CTCAGATTC TCAGACTGCA GTCTGCATTA GTCACCGGAG      360
GCTTACACAC AGGATGAAAG AAGCAGGAGT AGACCATAGG CAGTGGAGGG GTCCCATATT      420
ATCCACCTGC AAGCAGTGCC CAGTGGTCTA TCCCAGCCCT GTTTGTGGTT CAGATGGTCA      480
TACCTACTCT TTTCAGTGCA AACTAGAATA TCAGGCATGT GTCTTAGGAA AACAGAATCT      540
CGAG

```

(2) INFORMATION FOR SEQ ID NO:259:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:259:

```

GAATTCGGCC TTCATGGCCT ACATCAGCAT CCCTGGGAGC ATCAGAAATG CAGAGCTCAG      60
GCCCCCCCCG GAGCTACCGA ATCAGAACCT ACATTTTACA CACCCCTCAG CTCAGAGCTT      120
GTTTCTCCCT GGATTCCATG GCCCTGTGCT GCTGGCAGCC CGGGGTTAGG GCATTTCGTT      180
GTCACCTGGC GACGGTGAAG CCTAGTTTCC TCCAGAGAGA TTATGCTGCT CTCCATCCAA      240
GTGAAGTGGC AATGGTGCCA GCCTGAGATT TCTGCCCTGA GTTTTAAAGTA CGAGAGTGTG      300
GGCTGACAAT AACTCCTTT ATTCTACCCT CTCTGTTCT CATAAGGAGA AATTTAAATT      360
CTGGAAGAGA TGAAGCTTGC ATTTACCCAA GAC

```

(2) INFORMATION FOR SEQ ID NO:260:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 705 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:260:

```

GAATTCGGCC AAAGAGGCCT AAGGGATTGT TATTCCTTTA AAAAAAACC AATACCAAAG      60
AAGCCTACAA TGTGGCCTT AGCCAAAATT CTGTTGATT CAACGTTGTT TTATTCATT      120
CTATCGGGGA GCCATGGAAA AGAAAATCAA GACATAAACA CAACACAGAA CATTGCAGAA      180
GTTTTTAAAA CAATGGAAAA TAAACCTATT TCTTTGGAAA GTGAAGCAAA CTTAAACTCA      240
GATAAAGAAA ATATAACCAC CTCAATCTC AAGGCGAGTC ATCCCTCC TTTGAATCTA      300
CCCAACAACA GCCACGGAAT AACAGATTTC TCCAGTAACT CATCAGCAGA GCATTCTTTG      360

```



```

GGCAGTCTAA AACCCACATC TACCATTTCC ACAAGCCCTC CCTTGATCCA TAGCTTTGTT      420
TCTAAAGTGC CTTGGAATGC ACCTATAGCA GATGAAGATC TTTTGCCCAT CTCAGCACAT      480
CCCAATGCTA CACCTGCTCT GTCTTCAGAA AACTTCACTT GGTCTTTGGT CAATGACACC      540
GTGAAACTC GTGATAACAG TTCCATTACA GTTAGCATCC TCTCTTCAGA ACCAACTTCT      600
CCATCTGTGA CCCCTTGAT AGTGGAACCA AGTGGATGGC TTACCACAAA CAGTGATAGC      660
TTCCTGGGT TTACCCCTTA TCAAGAAAAA ACAACTCTAC CTACC                          705

```

(2) INFORMATION FOR SEQ ID NO:261:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 729 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:261:

```

GAATTGGGCC AAAGAGGCCT ACCTTACTTG AGTCCACAGG CAAGGCCCAA TAATGCATAT      60
ACTGCCATGT CAGATTCTTA CTTACCCAGT TACTACAGTC CCTCCATTGG CTTCTCCTAT      120
TCTTTGGGTG AAGCTGCTTG GTCTACGGGG GGTGACACAG CCATGCCCTA CTTAACTTCT      180
TATGGACAGC TGAGCAACGG AGAGCCCCAC TTCCTACCAG ATGCAATGTT TGGGCAACCA      240
GGAGCCCTAG GTAGCACTCC ATTTCTTGGT CAGCATGGTT TTAATTTCTT TCCAGTGGG      300
ATTGACTTCT CAGCATGGGG AAATAACAGT TCTCAGGGAC AGTCTACTCA GAGCTCTGGA      360
TATAGTAGCA ATTATGCTTA TGCACCTAGC TCCTTAGGTG GAGCCATGAT TGATGGACAG      420
TCAGCTTTTG CCAATGAGAC CCTCAATAAG GCTCCTGGCA TGAATACTAT AGACCAAGGG      480
ATGGCAGCAC TGAAGTTGGG TAGCACAGAA GTTGCAAGCA ATGTTCCAAA AGTTGTAGGT      540
TCTGCTGTTG GTAGCGGGTC CATTACTAGT AACATCGTGG CTTCCAATAG TTTGCCTCCA      600
GCCACCATTG CTCCTCCAAA ACCAGCATCT TGGGCTGATA TTGCTAGCAA GCCTGCAAAA      660
CAGCAACCTA AACTGAAGAC CAAGAATGGC ATTGCAGGGT CAAGTCTTCC GCCACCCCCA      720
ACACTCGAG                                         729

```

(2) INFORMATION FOR SEQ ID NO:262:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 686 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:262:

```

GAATTGGGCC AAAGAGGCCT ACTACCATGT CCTCTTGGAG CAGACAGCGA CCAAAAAGCC      60
CAGGGGGCAT TCAACCCCAT GTTCTAGAA CTCTGTTCTT GCTGCTGCTG TTGGCAGCCT      120
CAGCCTGGGG GGTCAACCCTG AGCCCCAAG ACTGCCAGGT GTTCCGCTCA GACCATGGCA      180
GCTCCATCTC CTGTCAACCA CTGCGGAAA TCCCGGCTA CCTGCCAGCC GACACCGTGC      240
ACCTGGCCGT GGAATTCTTC AACCTGACCC ACCTGCCAGC CAACCTCCTC CAGGGCGCCT      300
CTAAGCTCCA AGAATTGCAC CTCTCCAGCA ATGGGCTGGA AAGCCTCTCG CCCGAATTCC      360
TGCGGCCAGT GCCGCAGCTG AGGGTGCTGG ATCTAACCCG AAACGCCCTG ACCGGGCTGC      420
CCTCGGSCCT CTTCCAGGCC TCAGCCACCC TGGACACCCT GGTATTGAAA GAAAACCAGC      480
TGGAGGTCTT GGAGGTCTCG TGGCTACACG GCCTGAAAGC TCTGGGGCAT CTGGACCTGT      540
CTGGGAACCG CCTCCGAAA CTGCCCCCG GGCTGCTGGC CAACTTCACC CTCCTGCGCA      600
CCCTTGACCT TGGGGAGAAC CAGTTGGAGA CCTTGCCACC TGACCTCCTG AGGGGTCCGC      660
TGCAATTAGA ACGGCACATT CTCGAG                                         686

```

(2) INFORMATION FOR SEQ ID NO:263:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 571 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:263:

```
GAATTCGGCC AAAGAGGCCT AGGAGAGAGG AGGTGCTGCA AGACTCTCTG GTAGAAAAAT      60
GAAGAGGGTC CTGGTACTAC TGCTTGCTGT GGCATTTGGA CATGCTTTAG AGAGAGGCCG      120
GGATTATGAA AAGAATAAAG TCTGCAAGGA ATTCTCCCAT CTGGGAAAGG AGGACTTCAC      180
ATCTCTGTCA CTAGTCCTGT ACAGTAGAAA ATTTCCCACT GGCACGTTG AACAGGTCAG      240
CCAACTTGTG AAGGAAGTTG TCTCCTTGAC CGAAGCCTGC TGTGCGGAAG GGGCTGACCC      300
TGACTGTTAT GACACCAGGA CCTCAGCACT GTCTGCCAAG TCCTGTGAAA GTAATTCTCC      360
ATTCCCGGTT CACCCAGGCA CTGCTGAGTG CTGCACCAA GAGGGCCTGG AACGAAAGCT      420
CTGCATGGCT GCTCTGAAAC ACCAGCCACA GGAATTCCTT ACCTACGTGG AACCCACAAA      480
TGATGAAATC TGTGAGGCGT TCAGGAAAGA TCCAAAGGAA TATGCTAATC AATTTATGTG      540
GGAATATTCC ACTAATTACG GACAGCTCGA G                                     571
```

(2) INFORMATION FOR SEQ ID NO:264:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 313 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:264:

```
GAATTCGGCC AAAGAGGCCT ACCAAGCAAG AACAGCTAAA ATGAAAGCCA TCATTCATCT      60
TACTCTTCTT GCTCTCCTTT CTGTAAACAC AGTCACCAAC CAAGGCAACT CAGCTGATGC      120
TGTAACAACC ACAGAAACTG CGACTAGTGG TCCTACAGTA GCTGCAGCTG ATACCACTGA      180
AACTAATTC CCTGAAACTG CTAGCACCAC AGCAAATACA CCTTCTTTCC CAACAGCTAC      240
TTCACCTGCT CCCCCATAA TTAGTACACA TAGTTCCTCC ACAATTCTTA CACCTGTCTC      300
CCCCATACTC GAG                                     313
```

(2) INFORMATION FOR SEQ ID NO:265:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 343 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:265:

```
GAATTCGGCC TTCATGCCTA GCCTCTGAGT TCAGCTCAGA ACACAGATGA TCTCATTGAT      60
TCCTCACGTC AACCTTGGGA AATCTGGGTA CCCTGGGACG TCCACACATG AGGACCGAGG      120
CTCAGGGACA TCAAGGGACT GGCCTGGTCC CAGAAACAGG GAGTAAAAATG GGAAGTAAAC      180
TCAGTCCCAC GTCTGCCTGA CTCCAGAGTT TGGGCCACTG AACCATGCGG CTGCCATCTT      240
GGAGTTCTTT GAGCTGTGAA GTGCTGTGCA TCGTGTGATT CTGTGTCCCT TTTGTGCAGG      300
TACCAGGATT TCTATGCATT CGACCTGTCA GGAGCCACTC GAG                                     343
```

(2) INFORMATION FOR SEQ ID NO:266:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 340 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:266:

```

GAATTCGGCC TTCATGGCCT ACAGGAAGCA CAGAAAGACA AAATTGGAAA TGTCTAGTTC      60
CATGTTGATG CCTTCAGAAG ATGCAGGTGA ACAAAGAGAG GCCGGGAAAT CAGAGCTAGT      120
TGAAACCCAA CATGTTACCT TAGAGCCAGA GCTACCACTG AGTTCTCTAA GCACAGTCAA      180
ATCCCAGGAT TATGCTGAAA CAGAGCAGGA GGTCATTTTA CAAGCTATAG AGGCCATGGA      240
GGCCACAGAA GCCCTGGAGG CCACAGACGC CATGGAAGCC ATAGATCAAG GTAGCATGAA      300
AGATTATGGA GATG~GATCT CTAAGCTGGA AAGACTCGAG      340

```

(2) INFORMATION FOR SEQ ID NO:267:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 367 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:267:

```

GAATTCGGCC TTCATGGCCT AGGCACCCCT AGGCGACTCA GGGTTCGGGG AGGAGGAGAC      60
CAGACGGGGC CTTGGCTGGC ATGGCCTCTT CACAGGGCTG CCGTGAAGAA ACTTCGTGAC      120
AGCGGCGGAG AGGTGGCCCA GGAGTGAGAC AAGCAGGCCC CGGGCCTTGG ACTCAGACAT      180
GCTGGGTCCG GTCAGGCCCG TGTGGGAACC AGTGTTTTAG GGACTGGGTA CTCTCTTAGA      240
GAAGAACTGA TGCTAAAGAG TCAGGAAGAC ACGAGCGGGC CAAATAAAAG AGGAAGAGAG      300
GCCCTCAGGA CATCATGGCA CTTACTGCTT GGATTGTCTT CCCCCTCCAG AATTCTGTGG      360
ACTCGAG      367

```

(2) INFORMATION FOR SEQ ID NO:268:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:268:

```

GAATTCGGCC TTCATGGCCT ACTTGGGAAT TAACATCTTC GATAAATCCC AGAAGTCTTT      60
AAGTGACAGT AGAGAGCCTA CAGAGAAGCC TGGGAAAGCA GAAAAATCTA AGAGCCCAGA      120
AAAAGTGTCA TCGTTCTCAA ACTCCTCCTC CAACAAGGAA TCAAAAGTAA ACAATGAGAA      180
GTTTCGTACT AAGAGCCCCA AGCCTGCCGA AAGCCCCCAG TCAGCCACTA AGCAGTTGGA      240
TCAGCCCACT GCTGCTTATG AGTATTATGA TGCTGGCAAT CACTGGTGCA AAGACTGCAA      300
CACCATCTGT GGGACTCGAG      320

```

(2) INFORMATION FOR SEQ ID NO:269:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:269:

```

GAATTCGGCC AAAGAGGCCT AGGGATATTT ACTGAGGGCC TACAGGGTGC CCAATACTGA      60
GCTAGCTAGG CTCAGGGACC TGTACACACA TGCAATCTCC ATTAGGGTTC TGCAATCCTG      120
ACACTATTAC TATCCTCAAG GACTCTGCGC ATCCAGACCC GTCTATTAGT TAGCAATGAG      180
AACCCCTGCC ATGGCCAAGT TACACAAGAA CACCCTTGCC CTACCTCTGC CCCCTGCNGA      240
TCTGAAAGTA ACCTGGTCTG AAAGAGAAGT AAAGATGTGG CTGTCCCTGG GTGCTAGGGA      300
GAGAGGCCTG TTGACAAAGC CACCAGCTGT CTCCAGTCAG AGCCAGGGAG ACAGGCTTCT      360
CCCTGCACCA TCCGCACTGC CATAGACACA GCAGCCAGCA ACAGCACTTG GACCATTACG      420
GAGTTCAGG CCCAGTCTCC AACTGACCTC CCTCTGCTC CAGTGCCCA TGCTAACAAAG      480
AGCCAGGGCA CAAGACCTCA CTTGGAACAA GTACCAGGCA GAAGAGAGCA TNACCNGCCG      540
GT                                                                           542

```

(2) INFORMATION FOR SEQ ID NO:270:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 613 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:270:

```

GAATTCGGCC AAAGAGCCTA GTCGATTGAA TTCTAGACCT GCCTCCTTTT CCACTTGAAT      60
TGTTAAATTG TTTACTCCAG CATCTTTAAG TATTCCTGTA ACCTGCTGTA CTATTCCTTG      120
TTCTAGCACA TCAGATGTCA CCTGTATATG AATTGTTTCT GCCACAATAC TAGCAGAATG      180
ACGCCAAAAA TGTGGGTCTC GGTATGATAT TAATCCTTCA ATTTTCTGTA TCTTTTCTAA      240
AGCAATATGT AGTTCTTTT CATATTCTGG TGGCAATCTC AGGAGTAGAA CCTGGCAGGC      300
ATCTTTAATC AGTGAACAA CACTGAGAAA TATTAATATA GCAATAAAAA GAGAACAGAG      360
TGGGTCAGCG ATGAACCATC CAACTGCTC TATAAGAACT GTGGATACGA TCACACCAAT      420
GCTGCCAAGA GTATCTGCCA AAACATGTAG AAATACACCC CTCATGTTAG CATTATGCC      480
TCCACCCGCA GATCCGTGGC TGTGACCATG CCCATGGTCA CTGTGTCCAT GCATATGATG      540
TGAATGGCTG TGATCAGATG AGTGACAGCT TCCTTGAGCC TAAACCGTCG ATTGAATTCT      600
AGACTGCCTC GAG                                                                           613

```

(2) INFORMATION FOR SEQ ID NO:271:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 763 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:271:

```

GAATTCGGCC AAAGAGGCCT AGTCTGGTTC TTGCTTGATC TGAGAGCTTC CATCAGTCTC      60
TTTTATTCT TCTGTGGCTG GAACTTCCAA CTGGCTTGGT TCAGCTGATT CTTGTATCAC      120

```

GGGGCCTTCT	GACTCACTCT	GATCAACCAG	CTGGTTATTA	ATCACAAGTC	CTGGAATATG	180
TCTAATGACC	GTGAATTTGA	TAAACTCGGC	AGAGTCTAAG	ATCCTTCTCA	TGGAGCTGAT	240
TTCCAGGTAG	CTGGGGGCTT	TGAAAGGACA	CCCCCGGGG	CATGCCATCA	ACTACCACAC	300
AGCCAGGGTT	AATTGTGATT	TCCCTGTAGG	GAACTTTCAC	AGGAAAAACC	ATACCAATAG	360
CTTCACCAAA	TTTCCGACTA	AAGAGGTCAT	TCACTTGTTT	TCTTAGCTGT	CTAGCTTTTT	420
CAACTTTTCA	GAGTCTTTCA	TTATCATCAT	CTGGAATTGT	CACCTGAATG	ATGTTAAGGT	480
CTTCAACACC	TGATGCAGTA	GTATTAACAT	TGGGTGATGA	ATTTATTTTT	CTGGGAGGGC	540
TCTTAGAGGA	GGTGCTCTCC	TTAATCGCCG	TCTCAAACAT	TTCGGGCTTT	TTAATGATGA	600
ACTTAATTTT	GGCTTTGTTT	CTGAGTATCT	TCTCCAGCCT	CGGAATGCCA	AAAGTCGATG	660
GTCTTCGGAA	TGGCACACCC	TCAGGTAAGC	CTTCCACATA	AAAGTCTTCC	GGGAAAGACT	720
CAAATAACGC	GAACGGCACC	TTACAGCTT	GTTTAAGGCC	AAG		763

(2) INFORMATION FOR SEQ ID NO:272:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 102 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:272:

GAATTCGGCC	AAAGAGGCCT	AATTAAGGAA	ATACTTTGCA	TAAATTAATC	AGCCCCACAG	60
TATTTCTTA	ATAAGAATAA	AATGAATTTA	ACACTGATTC	TG		102

(2) INFORMATION FOR SEQ ID NO:273:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 565 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:273:

GAATTCGGCC	AAANAGGCCT	ACNCCAGTCA	AGGAAAGTCA	AGTNGCAAGA	AGGAANTGTC	60
TAAAAGAGAT	GGCAAGGAGA	AAAAAGACAG	AGGAGTGACG	AGGTTTCAGG	AAAATGCCAG	120
TGAAGGGAAG	GCCCCTGACG	AANACGTCTT	TAAGAAGCCC	CTGCCTCCTA	CTGTGAAGAA	180
GGAAGAGAGT	CCCCCTCCAC	CTAAAGTGGT	AAACCCACTG	ATCGGCCTCT	TGGGTGAATA	240
TGGAGGAGAC	AGTGACTATG	AGGAGGAAGA	AGAGGAGGAA	CAGACCCCTC	CCCCACAGCC	300
CCGCACAGCA	CAGCCCCAGA	AGCGAGAGGA	GCAAACCAAG	AAGGAGAATG	AAGAAGACAA	360
ACTCACTGAC	TGGAATAAAC	TGGCTTGTCT	GCTTTGCAGA	AGGCAGTTTC	CCAATAAAGA	420
AGTTCTGATC	AAACACCAGC	AGCTGTCAGA	CCTGCACAAG	CAAAACCTGG	AAATCCACCG	480
GAAGATAAAA	CAGTCTGAGC	AGGAGCTAGC	CTATCTGGAA	AGGAGAGAAC	GAGAGGGAAA	540
GTTTAAAGGA	ATAGGAAATC	TCGAG				565

(2) INFORMATION FOR SEQ ID NO:274:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 188 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:274:

```

GAATTCGGCC AAAGAGGCCT ACTTAAATCA AGGCCAAAAC TAAGGATTTA GGTAGAGTGT      60
ATTAGCCTTT CAATACCTGC TTATTAAACA GTTGTTTTCA TACTTTTCAA AGGTGTGTAG      120
AAGTTTGTGA AATAAATTTT CTGATAGGAT AACTAGATT CCCTATGATC TCTTATTAT      180
TTATCATT

```

(2) INFORMATION FOR SEQ ID NO:275:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:275:

```

GAATTCGGCC AAAGAGGCCT AGTCCGTGAT GCGTACACAC CTGTCGAGCA CGAGCTCCTC      60
TAGGCGGTGC AGGTCGCAGG CCACGTACTC CAGCGCCATG TCGGTGATNC GTGGGCACCA      120
CGAGAGGTCA AGGNTGCGCA GCTTGCGCAG GTTCTCGGCC ACGAGCTCCA CGCCGTCGTC      180
GGTGACCTTG GAGCAGCCCG AGAGGCTGAA CGCGGTGAGG TTGGGCAGGN TGTGCACCAC      240
GTTGACCACG CCGTGGTTGG TGATCTCCCA GCAGGAGAGC AGGCGCAGCG TGTGCGTGCT      300
GTGGCCCTGG CGCGCCGTGA AGTAGGCCAG CGCCGTGTCC GTCACGTGGT AGGCCTGCAG      360
GCTCAGCTCC GCCAGGTTGG GCAGCAGCTG CGAGATGGCC GCGATGGCGT CGTCGGCCAC      420
GTTGATGCAG TCACTCACGC TCAGCGAGGT GATGCGCGCG CTCAGGCTGG ACCACAGCCC      480
GGCCTCGGTG AAGTCGTTGC AGCCCGACAG CTCAGACGC ACCACGCCCT GCATCTGTTT      540
AAGCATAACC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:276:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:276:

```

GAATTCGGCC AAAGAGGCCT ACAGTGAATA ATCAGAAGTC AGTTTGGGAG AAGTCAAAAT      60
GGACACAATC TTCTTGTGGA GTCTTCTATT GCTGTTTTT GGAAGTCAAG CCTCAAGATG      120
CTCAGCTCAA AAAAATACCG AATTGTCAGT GGATCTTTAT CAAGAGGTTT CCTTATCTCA      180
TAAGGACAAC ATTATATTTT CACCCCTTGG AATAACTTGG GTTCTTGAGA TGGTACAACT      240
GGGAGCCAAA GGAAAAGCAC AGCAGCAGAT AAGACAACT TTAACAACAG AGGAAACCTC      300
AGCTGGGGAA GAATTTTTTG TACTGAAGTC ATTTTCTCT GCCATCTCAG AGAAAAACA      360
AGAATTTACA TTTAATCTTG CCAATGCCCT CTACCTTCAA GAAGGATTCA CTGTGAAAGA      420
ACAGTATCTC CATGGCAACA AGGAATTTT TCAGAGTGCT ATAAACTGG TGGATTTTCA      480
AGATACAAGG CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:277:

```

GAATTCGGCC AAAGAGGCCT ACACCCAGAG ACTGTAATTT GTGTAGTTT TCTTTTAA      60
CTTAAAGACA ACTTTAAAAA ATACTTACAT TAATGTTTTT TATATTCATA GGTGGGTATA      120
TTCGCCTCAT TCAAATGGCA GTAGCCTTGG CTCACATAAG ACATGTTTCA TGTGATCTGT      180
ATCCTGGCAT ACCAGTTATA TTTGTGGGG ACTTTAATAG TACACCATCA ACAGGAATGT      240
ATCATTTTGT CATCAATGGC AGCATTCCAG AGGATCATGA AGACTGGGCT TCCAATGGGG      300
AGGAGGAAAG ATGCAATATG TCTCTTACAC ATTTCTTCAA GCTGAAAAGT GCTTGTGGTG      360
AACCTGCTTA CACAAATTAT GTTGTGGGCT TTCATGGATG TCTAGATTAC ATTTTCATTG      420
ACTTAAATGC TTTAGAGGTT GAACAGGTGA TTCCATTACC TAGTCATGAA GAAGTTACCA      480
CTCCACTCGA G                                     491

```

(2) INFORMATION FOR SEQ ID NO:278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:278:

```

GAATTCGGCC AAAGAGGCCT ACAGAGAACA GATAAAAATA AGCCTGTGGA ATGACCACTT      60
TGTGGAATAC GGCAGAACCG TGTGTATGTT TCGCACAGAG AAGATTCCGA AGCTCGTAGC      120
CATGGGCATC CCTGAATCTT TCGAGGGGAG ACTCTGGCTT CTCTTCTCAG ATGCGGTGAC      180
GGATCTTGCC TCACACCCTG GTTACTACGG GAATCTGGTG GAGGAGTCCC TGGGGAAATG      240
CTGCCTGGTA ACCGAGGAGA TAGAACGAGA CCTGCACCGC TCCCTGCCAG AGCACCCCGC      300
CTTCCAGAAC GAAACGGGAA TTGCTGCTTT GAGGAGAGTC TTGACGGCCT ATGCCACCG      360
GAGCTCGAG                                     369

```

(2) INFORMATION FOR SEQ ID NO:279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:279:

```

GAATTCGGCC AAAGAGGCCT ACTCTCCCTT TCCACTCCCT GGTGTTCCCA GGAGTGAGAT      60
GAGGGTGGAG GGGCCCAGCA CAGCACCTTC AACCTCAGGA TGAGAGAGGC CCTTTCACAA      120
AACTCTAAGG CAGGGGAACA GGAACAGAG AAAGCCGGAG AACCCCAAGG GGGCCCCAAG      180
AGCGGATTCT GGTGATTATT AATGTGCTTG CCCAATGAAG AAAGAATACT GGCACCTCTCT      240
AGGTATGATG AGAGCAGACA GCAAACGTGG GGCCTGTCTA CAGTGATTCT CTACCCCAAT      300
GTATGGTCAT CCACGTTAGA AGCAGCAGTG AAAGGCGTGT TGCTTTTCAT TATTAACCTC      360
AAATCCCAGT CCCTAAACCA GCTCTTGACG CCCCTCTGTC AGGTGCTAAT CCTGGAAACT      420
GGAGGCCACC TGGTCTCCAC TTTAGGTGAG GAAAACCTGG GAGAAGCCAT CAGACTGCAC      480
CTGTGGCATG AGATGCTTTG AGACAGGTCA AGAGGAGGAG CTCTCGAG      528

```

(2) INFORMATION FOR SEQ ID NO:280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:280:

```
GAATTCGGCC AAAGAGGCCT ACAGTGTCCG AGTAGATTTG AACTGGAGG TGAAGGTAGG      60
AGTAAGTGAT AGATTTTAGA ATTAGTGCTC AGAGCTGAAA TATCCAGTCC GTGAACCTAG      120
AGGCCAGCCT TCATACCACT GTGATGACAG GAACTACCCCT AATCTTTTCT GTCCTTTTCT      180
CTCTGCTGTC CCTCGGGCTG CCAGGCCAGC AGCAACACCC ACAGGTAATC TCCCCGCTGA      240
CTCCATCCAC TTGCTCTGCC CTCTGCCCTC TCTGTGCCCC GTTGACCTG AGCGTACACC      300
CCAGCAGTGG CATCCAATC GAG                                         323
```

(2) INFORMATION FOR SEQ ID NO:281:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 337 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:281:

```
GAATTCGGCC AAAGAGGCCT ACTCAGTCAG TACCATGCCA GTTACCTTTT TTCCTTGTGA      60
CTTAATGAAT TGGATTTTCC TCAATCTGTT ATTTGTAGGA GGTTTGTATG GGGCCAGGGT      120
AGATTTCCAG ATTTCTGCCT CAGAGGTAGT CTTTTCACA TATGACACCT GGGTGTGTTT      180
CTCTGTGTGG CCACAAGTCT TCTGCCTCTC TAAAAAATG TCTAGACCTT CTAGAAGGTC      240
TTTGCCGCT AATTCTGAAC TTCCACTCC TTCCTTTGCA GCTGTGATTG GAGGGACATG      300
GCTCCAGCAT GCCAATGTAA ACCACGCCCC CCTCGAG                                         337
```

(2) INFORMATION FOR SEQ ID NO:282:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 194 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:282:

```
GAATTCGGCC AAAGAGGCCT AGGCTCTTCC ACTTAATTTC ATACTTTCAG GTCTGGATGC      60
CCATTTTAAT TCTTCTGAAA GCATGCCTCC TTCTGGCTTC AGGACTCCAT CTCCAGCCTT      120
ATGATCTAAA AATAATGGAA AATTACCCGG TATCGTTAGA GCTACACCAA AATTGCATTG      180
AGCCAAACT CGAG                                         194
```

(2) INFORMATION FOR SEQ ID NO:283:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 296 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:283:

GAATTCGGCC	AAAGAGGCCT	AAAATCATCA	TATTCATAGA	GATATTAAAA	GTGCAAATAT	60
CTTACTGGAT	GAAGCTTTTA	CTGCTAAAT	ATCTGACTTT	GGCCTTGAC	GGGCTTCTGA	120
GAAGTTTTC	CCAGACAGTC	ATGACTAGCA	GAATTGTGGG	AACAACAGCT	TATATGGCAC	180
CAGAAGCTTT	GCGTGGAGAA	ATAACACCCA	AATCTGATAT	TTACAGCTTT	GGTGTGGTTT	240
TACTAGAAAT	AATAACTGGA	CTTCCAGCTG	TGGATGAACA	CCGTGAACCA	CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:284:

GAATTCGGCC	AAAGAGGCCT	AGCAACATCC	ACGCAGCTGC	TCATCAGGTA	CGAGTGCTTC	60
CATATCCATT	TACCCACCAT	TGGCAATTG	AAAGGACCAT	CCAGACCCCC	ATAGGATCCA	120
CATGGAACAC	CCAGAGGGCT	TTCCAAAAGC	TGACTACTCC	CAAGGTCGTC	ACCAAGCCAG	180
GCCATATCAT	TAACCCATA	AAAGCAGAAG	ACGTGGGCTA	CCGGTCTTCC	TCAAGGTCGG	240
ACCTGTCTGT	CATACAGAGG	AATCCAAAAC	GAATCACCAC	ACGTCACAAA	AAACAGCTGA	300
AGAAATGCTC	TGTAGATTGA	GTTGCTGGAG	GAGTGACAGC	CAGGAGCCCT	GACTTCACTT	360
CCTTTGGTCC	AGTTTACTC	TGATACAGGG	TGGATTCCAA	AACTGGCTCA	GTACATTGCA	420
TGTAGTTAAG	CCACATTTTA	AAAATAAAGG	CTCGAG			456

(2) INFORMATION FOR SEQ ID NO:285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:285:

GAATTCGGCC	AAAGAGGCCT	AAGGTCGGCC	TGTTTATCTT	GATTAGCATC	CAGGCCTTGG	60
AATATTTTCA	CAATGACAGC	TTTATCTTTG	ATATTCTTGA	TGGTGTTTGC	AAGCTCCTTT	120
GTAAGCAGCT	GCTTCAGCTC	ACCCCTCGAG				150

(2) INFORMATION FOR SEQ ID NO:286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:286:

AATCCAAGCA ATAACCCAAG CAAAACCTCA GATGCACCTT ATGATTCTGC AGATGACTGG 60
TCTGAGCATA TTAGCTCTTC TGGGAAAAG TACTACTACA ATTGTCTGAAC TCGAG 115

(2) INFORMATION FOR SEQ ID NO:287:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 278 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:287:

GGAAGAAGAT GCTAGGAGAA GACTCAGATG AAGAAGAGGA AATGGATACC TCTGAAAGGA 60
AGATAAATGC TGGTAGCCAA GATGATGAGA TGGGTTGCAC CTGGGGAATG GGAGAAGATG 120
CAGTAGAGGA TGATGCTGAA GAGAACCCTA TTGTCTTAGA GTTTCAGCAG GAAAGGGAGG 180
CCTTTTATAT AAAGGATCCC AAAAAGGCTC TCCAAGGCTT TTTTGACCGA GAAGGAGAAG 240
AATTAGAATA TGAATTGAT GAACAGGGAC AACTCGAG 278

(2) INFORMATION FOR SEQ ID NO:288:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 364 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:288:

GGATTCTGA GGCCAAGTGC CCAATAGTTT CCAGTAGAAA CATGGCCATA CCAGTCTAGA 60
ATTTAACCTT CTCATTTAAT CAATAGCACA ATCTAACCTA CACAAGAATA AGCAATCAAA 120
CATCCAGTAT AACATGTTTT TCATTTTAC TTCTTGCGG TCAATTTTTT TAATGATCTA 180
TTTAAAATTT TTTCAAAATG ACAACTACTA TGAATACTG AATACAAAGT TCAGTAACAC 240
AACATTGATA ACAACAACAG CAGCAACAAT ACCACAACCA CCACCACTGA ATGGTCTGGG 300
CACCTTCACA ATGGCTGTTG TACTTAGTTA CGAAGAAGAG TGGGGACAGA AAATGAAGCT 360
CGAG 364

(2) INFORMATION FOR SEQ ID NO:289:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 471 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:289:

GACTCCATGC GTATGTCCCA CCTAAAGGTC GGCTCTGCTG CCGACATCCC CATCAACATC 60
TCAGAGACGG ATCTCAGCCT GCTGACGGCC ACTGTGGTCC CGCCCTCGGG CCGGGAGGAG 120
CCCTGTTTGC TGAAGCGGCT GCGTAATGGC CACGTGGGGA TTTTCATTCTG GCCCAAGGAG 180
ACGGGGGAGC ACCTGGTGCA TGTGAAGAAA AATGGCCAGC ACGTGGCCAG CAGCCCCATC 240
CCGGTGGTGA TCAGCCAGTC GGAAATTGGG GATGCCAGTC GTGTTCTGGGT CTCTGGTCAG 300
GGCCTTCACG AAGGCCACAC CTTTGAGCCT GCAGAGTTTA TCATTGATAC CCGCGATGCA 360

GGCTATGGTG GGCTCAGCCT GTCCATTGAG GGCCCCAGCA AGGTGGACAT CAACACAGAG 420
GACCTGGAGG ACGGGACGTG CAGGGTCACC TACTGCCCA CAGAGCTCGA G 471

(2) INFORMATION FOR SEQ ID NO:290:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 281 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:290:

GAATTCGGCC TTCATGGCCT AGATTGAGTC ACATTGTTCT CTTTGATCCA TTTTCTTTA 60
GACAACATCA CTCAAACAAC CCTATTACTT CAGTAGCAAT GAACTGTCTC TGGATTTTAT 120
TAAGCATCTC ACTTGTTCCT TTTCTTCAGC TGTATGGCAC CCTGTCTTCC TGTACACCAG 180
AGGCTCCTCA GCTGGGTAAG GTGAGCCAAC GTTACCAGGA GTATATGCTG AGAGGCCATT 240
TCAAAGTCTT TCATAGAAGG CTGTGCTTGG GCAAACCTCGA G 281

(2) INFORMATION FOR SEQ ID NO:291:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 250 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:291:

GAAACTCTGC CCTGAAGGT TTGTTTCTA ATTCAGAGGT TAAATTAAT CTAGCCCACT 60
TAATAAAACC AGAGATCCTA TGGGAAATTT AGCCTAAGAC AGTGCTGGAA ATTGCCATAT 120
GTTGATACAA AGAAGTGTTT GGCCACATTA CAGGTCTCAG ACTCAACTGC TATGTGTGAC 180
TGCCGCTCTG TGCCTATGTC TTGCTTTTTT GCTGAGTTCC CTATTTCCAT ATCTCCAGGT 240
GATCCTCGAG 250

(2) INFORMATION FOR SEQ ID NO:292:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:292:

GAAATGTCAG AGGCACATAA GCTTTTACAA AAATTGTTGG TTCATTGTCA GAAACTGAAG 60
AACACAGAAA TGGTGATCAG TGTCTACTG TCCGTGGCAG AGCTGTACTG GCGATCTTCC 120
TCCCCTACCA TCGCGCTGCC CATGCTCCTG CAGGCTCTGG CCCTCTCCAA GGAGTACCGG 180
TTACAGTACT TGGCCTCTGA AACAGTGCTG AACTTGGCTT TTGCGCAGCT CATTCTTGGA 240
ATCCCAGAAC AGGCCCAACT CGAG 264

(2) INFORMATION FOR SEQ ID NO:293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:293:

```

GAATTCGGCC CTCATGGCC TAGGTTTCTC CGTGTGGTC AGGCTGGTCT CGAACTCCTG      60
ACCTCAGGTG ATCCACCTGC CTCAGCCTCC CAAAGTGCTG GGATTACAGG CATGAGCCAC      120
CATGTCCTGC TATAAATAAC TTTTAATAGG CTCTTTTCTT GGCTTTTTTT TTTAGTAACT      180
CAGCCCATTT TCTTCTTCTC AATCTGGTCT TGTTAATGT TGATAACGCT GTCTTACTTT      240
TAAATTGCCG TGATTAGAAA TTAGTAGAGA TATATAAACC TAGTCTTTTG GGGGATTTTG      300
AAAGGGTCAT AGTATTCTTA CTGTCTTTCA AAATGTACCT TATATTTGAA CATTGGAAGA      360
TACGTGTTGC TGAATACAAG TTAGTTTCAT ACACACACAT ACACATGACA CTCGAG      416

```

(2) INFORMATION FOR SEQ ID NO:294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:294:

```

GAATTCGGCC TTCATGGCCT ACTCCATTCC CAGATAGAAA GCTTGAATGA AGAGTTGGTC      60
CAGCTGCTTC TCATCCGAGA TGAGCTGCAC ACAGAGCAGG ATGCCATGCT GGTGGACATT      120
GAAGACTTGA CCAGACATGC TGAAAGTCAG CAGAAGCACA TGGCAGAGAA AATGCCCTGCA      180
AAGTGAAAAG AAGCCATTCA ACCAGAGAAC AAGCTAGAAT TTATTTTGCT TCTGTGGTTG      240
TAAAAATGCT GTTGCTAAAG GTGGCGCAGA AACAAATATC AGTGTTAGTC ATTGATAATG      300
TCTGAAGCTT AATGTCCAGT GATTGGCCTT TGCTTCTTAA TTTATTTTAA TTTTCTACTT      360
GTGCCACTTA ATATCAGGCA TTTTAATAAA ATATTGTTAC AAAAAATGTA CAGTACTGAC      420
ACCACCACAA ATCATGGTTA ATAAAAGAGA GTCTCGAG      458

```

(2) INFORMATION FOR SEQ ID NO:295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:295:

```

GTGTAAAACC AATGCCAGGA AAACCAATA CAAAAACCC TCCACGGAGA GGTCTCTGTA      60
GCCAGAATGG GTCTTTTGGC CCATCCCCTG TGAGTGGTGG AGAATGCTCC CCTCCATTGA      120
CAGTGGAGCC ACCCGTGAGA CCTCTCTCTG CTA CTCTCAA TCGAAGAGAT ATGCCTAGAA      180
GTGAATTTGG ATCAGTGGAC GGGCCTCTAC CTCATCCTCG ATGGTCAGCT GAGGCATCTG      240
GGAAACCCCTC TCCTTCTGAT CCAGGATCTG GTACAGCTAC CATGATGAAC AGCAGTCTCG      300
AG      302

```

(2) INFORMATION FOR SEQ ID NO:296:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 412 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:296:

```
CATGGATCTG CCTCCTGAGA GGGATGGAGA GAAGGGGAGG AGCACAAGC CTGGCTTTGC      60
CATGCCAAAA CTTGCACTTC CCAAAATGAA GGCTTCTAAG AGTGGGGTCA GCTGGCCACA      120
GAGAGACGTG GATCCTTCCC TTTCTAGTGC CACAGCAGGG GGTAGCTTTC AAGACACAGA      180
AAAGGCCAGC AGTGACGGTG GTAGGGGAGG ACTTGGTGCA ACAGCAAGTG CCACAGGAAG      240
TGAGGGTGTG AACCTCCACC GGCCACAGGT CCACATTCCC AGTTTGGGCT TTGCCAAACC      300
TGATCTCAGA TCCTCCAAGG CCAAGGTGGA GGTGAGCCAG CCTGAAGCTG ACCTGCCTCT      360
TCCCAACAT  GATCTGTCTA CCGAAGGTGA CAGCAGAGGA TGTGGGCTCG AG      412
```

(2) INFORMATION FOR SEQ ID NO:297:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 308 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:297:

```
GTGCTGGTGG CGCGGGGAGT GCGCGTCAAG GTGAACGAGG CCTACCGGTT CCGCGTGGCA      60
CTGCCTGCGT ACCCAGCGTC GCTCACCGAC GTCTCCCTGG CGCTGAGCGA GCTGCGCCCC      120
AACGACTCAG GTATCTATCG CTGTGAGGTC CAGCACGGCA TCGATGACAG CAGCGACGCT      180
GTGGAGGTCA AGGTCAAAGG GGTCTCTTTT CTCTACCGAG AGGGCTCTGC CCGCTATGCT      240
TTCTCCTTTT CTGGGGCCCA GGAGGCCTGT GCGCGCATTG GAGCCCATAT CGCCACCCCA      300
ATCTCGAG                                     308
```

(2) INFORMATION FOR SEQ ID NO:298:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 269 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:298:

```
GAATAAGTAA ATTCATGGAA AGGAAGAAAT TAAAGAAAAG TGAGGAAAAG GAAGTGCTTC      60
TGAAAACAAA CCTTTCTGGA CGGCAGAGCC CAAGTTTCAA GCTTTCCCTG TCCAGTGGAA      120
CGAAGACTAA CCTCACCAGC CAGTCATCTA CAACAAATCT GCCTGTTTCT CCGGGATCAC      180
CTGGATCCCC AGGATCTCCA GGCTCTCCTG GATCCGTACC TAAAAATACA TCTCAGACGG      240
CAGCTATTAC TACAAAGGGA GGTCTCGAG                                     269
```

(2) INFORMATION FOR SEQ ID NO:299:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 458 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:299:

GAGCGACCTT TGGAAATAGTT AAGCACAGGT CATTGTGGAC ATGAATTCAG GCCTCTGTAC	60
TAAAATCTAT TTCAGGGAAT GTTCTGTCTA GTGATTGCT CACCATTTGA TATATAATGA	120
ATTATAGGAC AAGTATAAGC TGATCTGCTA TAGCTGTCCA TCAGAGAGAA TACACGTGGC	180
TATAACATCT ATAACAAAAC GACGATTCCCT CTACAAGAGG CTGTTTCTCA CTGCTAACGT	240
TGGTGTTTCT GCGGTGGGAA GAAATGCACA GCGGTGCATG GCATGCACGT TCAGACAGCT	300
GCATTGTAAG AGTTCTGTCA TGCAGTCTGA AAAGGGAAGA AACAGGATGG CTTTCTGTAG	360
CCACACCTGT GAGGCGTGAT GATTGTTGTA TTATTAGATT ACTGATTTT CTTTCTGAA	420
AATACATTG AGTTTTAATC ACATCTGTGG AACTCGAG	458

(2) INFORMATION FOR SEQ ID NO:300:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 99 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:300:

GGGATGCC TG TCTTGGGGT AGAGAAGTCA GGTAGCCCAG GGCCCGCACT CTCAATAGAC	60
CTTCAGAGAA AAGGCATCGA GGTAAATGCC GCACTCGAG	99

(2) INFORMATION FOR SEQ ID NO:301:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 569 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:301:

GGTCTAACAG TAACACTACT CAAGAGACCC TGGAAATAAT GAAAGAATCA GAAAAAAAC	60
TGGTGGAAGA ATCTGTAAAC AAAAACAAGT TTATATCTAA GACTCCAAGT AAGGAAGAAA	120
TTGAGAAAGA ATGTGAAGAT ACCAGTTTGC GTCAGGAGAC ACAGAGGCGG ACATCTAACC	180
ATGGTCATGC CAGGAAAAGA GCCAAGTCTA ATTCCAAGCT AAAGTTGGTG CGTAGCCTGG	240
CAGTGTGTGA GGAGTCCTCC ACCCCATTG CTGATGGGCC ATTAGAAACC CAGGATATAA	300
TTCAATTGCA CATCAGTTGC CTTCTGACA AGGAGGAAGA AAAGTCCACA AAAGATGTCT	360
CTGAAAAGGA AGACAAGGAC AAAAACAAAG AAAAGATCCC AAGGAAGATG CTGTCCAGAG	420
ACTCCAGCCA GGAATATACG GACTCCACTG GAATAGACCT ACATGAATT CTTGTAAATA	480
CACTGAAAAA GAACCAAGG GACAGAATGA TGCTGCTAAA ATTAGAACAG GAGATTCTGG	540
AATTTATTAA TGACAACAAC CCACTCGAG	569

(2) INFORMATION FOR SEQ ID NO:302:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 311 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:302:

```
GCGATTGAAT TCTAGACCTG CCACCCAAAC CCCAACTCTC AGACTTACCT CCCAAACCAC      60
AGATGAAGGA CCTGCCCCC AAACCACAGC TGGGAGACCT GCTAGCAAAA TCCAGACTG      120
GAGATGTCTC ACCCAAGGCT CAGCAACCCT CTGAGGTCAC ACTGAAGTCA CACCCATTGG      180
ATCTATCCCC AAATGTGCAG TCCAGAGACG CCATCCAAAA GCAAGCATCT GAAGACTCCA      240
ACGACCTCAC GCCTACTCTG CCAGAGACGC CCGTACCACT GCCCAGAAAA ATCAATACGG      300
GGGCACTCGA G                                     311
```

(2) INFORMATION FOR SEQ ID NO:303:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 683 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:303:

```
ACAGCATGAA GGCAGAAGCC AATGCCCTGC ATCACAACA CGACAAGAGG AAGCGTCCGG      60
GGAAGAATGC ACCCCAGGA GGTGATGAGC CACTGGCAGA GACAGAGAGT GAAAGCGAGG      120
CAGAGCTGGC TGGCTTCTCC CCAGTGGTGG ATGTGAAGAA AACAGCATTG GCCTTGGCCA      180
TTACAGACTC AGAGCTGTCA GATGAGGAGG CTTCTATCTT GGAGAGTGGT GGCTTCTCCG      240
TATCCCGGGC CACAACTCCG CAGCTGACTG ATGTCTCCGA GGATTTGGAC CAGCAGAGCC      300
TGCCAAGTGA ACCAGAGGAG ACCTAAGCCG GGACCTAGGG GAGGGAGAGG AGGGAGAGCT      360
GGCCCTCCC CGAAGACCTA CTAGGCCGTC CTCAGCTCT GTCAAGGCAA GCCCTGGACT      420
CGGAGGAAGA GGAAGAGGAT GTGGCAGCTA AGGAAACCTT GTTGGCGCTC TCATCCCCC      480
TCCACTTTGT GAACACGCAC TTCAATGGGG CAGGGTCCCC CCCAGATGGA GTGAAATGCT      540
CCCCTGGAGG ACCAGTGGAG AACTGAGGCC CCGAGACAGT GAGTGGTGGC CTCACTGCTC      600
TGCCCGGCAC CCTGTACCT CCACCTTGCC TTGTTGGAAG TGACCCAGCC CCCTCCCCTT      660
CCATTCTCCC ACCTGATCTC GAG                                     683
```

(2) INFORMATION FOR SEQ ID NO:304:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 653 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:304:

```
GAATTCGGCC AAAGAGGCCT AGAGATGTCT ACTCTCAGCT CACGCCTGTA ATCCCAGCAT      60
TGTGGGGAGG TCAAGTTGGG TGGATTGCTT GAGCCCAGGA GTTTGAGACC AGCCTAAGCA      120
ATAGGCAAAA CCCTGTCTCT ACAAAAATCA GCCAGGTATG GTAGTGTGTA CCTGTAGTCC      180
TAGCTACTCA GGAGGCTGAG GTGGGAGGAT CGCTTGAGCC TGGGAGGTGA AGGCTGAAAT      240
TAGCCATGAT CATGCCACTG CACCCCAAGC CTGGGCAACA GAGCAAGACC TTGTCTCAAA      300
AAAAAAGGA TGAGCTAGGT TTGTATCTGT AGACAGAGAT TTATGATTAA TTGGTAGGTG      360
AAAAAGTGTA TTAAAGTACA GTTATAGATT AGAGTACAAA ATGAATGAGT ATATATGCGT      420
```

TTAAAAGTAT GTATACATAT CAGGAAAGGT TACATGAGGA TTTTCACTTT CCACTTTATA	480
TCTCCAGTA TTTGAATTTT TAATAACAAT CTTTTTATCA TAAACTATA TTAAATTAAA	540
CTTTTAGATT TTTTAGTGGT ATAAGTAGAA CAGGAACCCCT AATACATTGT TTTCTACTTT	600
TGTGATAAAG ATAATTCATG ATAGATGAAG TTGCAAACCG AAAGATCCTC GAG	653

(2) INFORMATION FOR SEQ ID NO:305:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:305:

GAATTCGGCC TTCATGGCCT AAGGTATTCC AAAATGTCTA ATTTATTTTA TCCGATGGTA	60
AATGTAATAA TTAAAGAAAG AGGAAAGAAT CATGAAAGGT GGCCCTTAAA GAGGGCTTCT	120
GGCAGAGTTA GGTGAGAGGC AACTTTTCTT ACAGACTAAG AGTTTTTAAAG TACTCAAGGT	180
GATGTTTATC AGAAGCTTGG ACTGCTTCTG TGTCTTTTAA TTGTGCTTAT CTGGGAGGGA	240
GAGTTCTGTG TCTGCTCCTA TACATCTTTC TGCAGCTGCA GACATACTCC CTGAGTCTGC	300
TTTTAGCTTT CCTATCTTAG TGCACCTGAA GGGAAAGGAA TGAGCTTATT AAGGCCCACT	360
GTTTTACTGG GGCCCATTTG ATGAGAGTGA AGTTTGGCAG TTACCCAAGA GACGTTCCCC	420
TCACCTCCCT CCGGCGCTCG AG	442

(2) INFORMATION FOR SEQ ID NO:306:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:306:

GAATTCGGCC TTCATGGCCT ACCAATATGC AAATCAGTAC CTCTTCTCTT AGAGGTGTTT	60
ATGCCCAAGC TCCTCAGACA AGTCCATCCC ACTGTGTGGG AGGAAGTTGA AGGGTGAGGA	120
TTTTTAAGAT TTTTATCTTG CTTGAAGTTG TGAAGACTCA ATGACAAATG GCTAGGTTTT	180
GAAGGGTCTT TGGAAATCAT TACTGGGGAT AGACCCCTCT TGATACTTGT CACATTAATA	240
TCTGCCCAAG CTCTCACACA TTCAGATGTT TAACGTGACA TGCATTAAGT TCTTTTGGTT	300
GATGAGACA GTGATGCACA GAACTCACT TAGGAAAGGA GATAGGTGGC AATAAAGAAA	360
ACAGGGATT CATAGGAATG CAGTAAAAAA AAAACCATGG CCTAATCTCG AG	412

(2) INFORMATION FOR SEQ ID NO:307:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:307:

GGGGTTGTCT GAGGCCCAAG GGTGCTATAA GGGCCGCTCT ACGGTGTCCT GGGGCCCGGG	60
---	----


```

CTTGCCCTT GTTGCAAG GGTGAGGAG CCGGGCTGGG CCCTGCGCAC CTCCCGGGG 120
AGCTCGCCCT GCTTGGCCAG CTTCTCCCAT AGCTGCTCCT TCCGCCTGAG CTTCTTGGCG 180
TTGGGGACCT GGTGGGCGAG GACGTCTTTG GGGGCAGGGA CTTTGGATGT GTTCTCGAG 239

```

(2) INFORMATION FOR SEQ ID NO:308:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 533 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:308:

```

GCGCACCATC CTGGGAAGTG CATGTCTCAG ACCAACTCCA CCTTCACCTT CACCACCTGT 60
CGCATCCTGC ATCCTTCAGA TGAGTCACT CCGGTCACAC CAAGCCTTAA CTCAGCCCCA 120
ACTCCAGCTT GTGGCAGCAC CAGCCACTTG AAATCCACGC CGGTGGCCAC ACCATGCACT 180
CCACGGAGAC TGAGCCTGGC TGAGTCCTTC ACTAACACCC GTGAGTCCAC GACCACCATG 240
AGCACATCCC TGGGGCTCGT GTGGCTGTTG AAGGAGCGGG GCATTCTGTC TGCCGTGTAC 300
GACCCCAAGA GCTGGGACAG GGCCGGCCGG GGCTCCCTCC TGCACTCCTA CACGCCCAAG 360
ATGGCTGTGA TCCCTCTAC TCCGCCGAAC TCGCCTATGC AGACACCCAC ATCCTCCCA 420
CCCTCCTTTG AGTTCAAGTG CACGAGCCCT CCCTACGACA ATTTCTGGC TTCCAAGCCA 480
GCCAGTCCA TCCTGAGGGA AGTGAGAGAA AAGAAGCTCC GCAGGACCTC GAG 533

```

(2) INFORMATION FOR SEQ ID NO:309:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:309:

```

GAATTCGGCC AAAGAGGCCT ACCCTAAAC ATTTATTTCAG AGGAGAAAAG AAAAAGGGG 60
GGCGCAAAAA TGGCTGGGGC AATTATAGAA AACATGAGCA CCAAGAAGCT GTGCATTGTT 120
GGTGGGATTC TGCTCGTGTT CCAAATCATC GCCTTTCTGG TGGGAGGCTT GATTGTCCA 180
GGGCCCACAA CGGCAGTGTC CTACATGTCG GTGAAATGTG TGGATGCCCG TAAGAACCAT 240
CACAAGACAA AATGTTTCGT GCCTTGGGGA CCAATCATT GTGGCAAGAT CCTCGAG 297

```

(2) INFORMATION FOR SEQ ID NO:310:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:310:

```

GAATTCGGCC AAAGAGGCCT AGGGTTTAAG AGCTGTGGAG GACTGAAAAC TGGATAAAAA 60
GGGGGTCCTT TTCCTTGCCC CTGTCTCTCA CTCAGATGCG CTTCTTTTTC GCCACTGTTT 120
GGCAAAGTTT TCTGTTAAGC CCCCAGTTCT CCAGGTGCGT TACTATTTCT GGGATCATGG 180

```

GGTCAGTTTT AGGACACTTG AACACTTCTT TTCCCCCTC CCCAGTTCTC CAGGTGCGTT 240
ACCTCGAG 248

(2) INFORMATION FOR SEQ ID NO:311:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 343 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:311:

GAATTCGGCC AAAGAGGCCT AGGTAAATAA CTAATATTGA TGTATTTTTA TATTTTAATA 60
 TAGACTAGTA AACTATGCAG AGTTAAGTGT TACATTAGAA TCTTGAAC TCCTAACATT 120
 TCTCTTCCTC AGTTTCCTAT TGTTTGGTA GAGTATGTAG ACATTGCGA GATTAATTTA 180
 GAGTTGGTAG ATACATTCTG GATTTTCAAT TACTTTAGAT AGCAGGTTTG GCACTTTAAA 240
 TATATTAAAT TCAGTAAGAG AATAACTGAG TATGAGCTGT ATCCTCATCT TACTGTTGAA 300
 GACATCCCAA ATAGTTGGGT GTGCACTGTG GCGGGATCTC GAG 343

(2) INFORMATION FOR SEQ ID NO:312:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 268 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:312:

GAATTCGGCC AAAGAGGCCT ACGGGGAGGC GCGCCCGCGC TGAGTCGGCG GCGGGTAGCC 60
 ACTCCATGCC CTTGTCCGAT GGTTTGCAAC TCCGATTTTG CACACCGCTC CACCGTGCCC 120
 CCCAGCGCAC ACCCATTCAC ACTCAGGCCA AACTCTCGC TGAACACTTT TATAATTGTT 180
 AGGCGTGGCC GTTGGGACTT TGGGCGCAGC GCGGCTGATA CTGCGTCTGG AGGATTGATA 240
 TTTACTTTTG CATTGCGGTT ACCTCGAG 268

(2) INFORMATION FOR SEQ ID NO:313:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 354 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:313:

GTCTCTCGCC GCCGGAGGAA GATGANGCTG AAGATTGGAT TCATCTTACG CAGTTTGCTG 60
 GTGGTGGGAA GCTTCCTGGG GCTAGTGGTC CTCTGGTCTT CCCTGACCCC GCGGCCGGAC 120
 GACCCAAGCC CGCTGAGCAG GATGAGGGAA GACAGAGATG TCAATGACCC CATGCCCAAC 180
 CGAGGCGGCA ATGGACTAGC TCCTGGGGAG GACAGATTCA AACCTGTGGT ACCATGGCCT 240
 CATGTTGAAG GAGTAGAAGT GGAATTAGAG TCTATTAGAA GAATAAACAA GGCCAAAAAT 300
 GAACAAGAGC ACCATGCTGG AGGAGATTCC CAGAAAGATA TCATACTTCT CGAG 354

(2) INFORMATION FOR SEQ ID NO:314:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:314:

```

GAATTCGGCC AAAGAGGCCT AGTGCAAGAA CATGAAGCAC CTGTGGTTT TCCTCCTGCT      60
GGTGGCAGCT CCCAGATGTG TCCTGTCCCA GGTGCACCTG CAGGAATCGG GCCCGGGACT      120
GTTGAAACCT TCGGACACCC TGTCCCTCAC CTGCTTTGTC TCGGGTTACT CCCTCAGTAG      180
TGTTCACTAT TGGGGCTGGA TCCGCCAGTC CCCAGGAAA GGA CTGGAGT GGATTGGGAA      240
CATCCATCAC AATGGTAGAA CCAATTACAA CCCGTCCCTC GCCAGCCGCG GTTCCATCTC      300
AGCCGACACG TCCAGAACT CCCTCTCCCT GAATCTGACC TCTGTGACCG CCGCAGACTC      360
GGCCGTCTAT TTCTGTGCGA GCGGCCCTAT TGCCTCCTTT GAATCGACGA CTCTAAAGGT      420
GGGCGGAGAC TTCACTCCT GGGGCCAGGG AATCCTGGTC ACCGTCTCCT CAGCATCCCC      480
GACCAGCCCC AAGGTCTTCC CGCACAGCCT CGAG                                         514

```

(2) INFORMATION FOR SEQ ID NO:315:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:315:

```

GAATTCGGCC AAAGAGGCCT AGGACACTAG AATTATTAGT GTTCATTTTC ATCTAAGATC      60
TTTATTCTCT AACGTTCTTG GTCCTATTGA AACATTGCAG TATGCAAAAC TACTGCAATG      120
TTAAACCCAA GAGAAAAGCC ATTATCATGT GTATGCTGGT CATCATGATC AGTGTGGTAC      180
AATTTTAA AATAAACTAT CATGCCCTTC TCGAG                                         215

```

(2) INFORMATION FOR SEQ ID NO:316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 788 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:316:

```

GAATTATGTA CGCCCTCTTC CTCCTGGCCA GCCTCCTGGG CGCGGCTCTA GCCGGCCCGG      60
TCCTTGGA CT GAAAGAATGC ACCAGGGGCT CGGCAGTGTG GTGCCAGAA GTGAAGACGG      120
CGTCCGACTG CGGGGCAGTG AAGCACTGCC TGCAGACCGT TTGGAACAAG CCAACAGTGA      180
AATCCCTTCC CTGCGACATA TGCAAAGACG TTGTCACCGC AGCTGGTGAT ATGCTGAAGG      240
ACAATGCCAC TGAGGAGGAG ATCCTTGTTT ACTTGGAGAA GACCTGTGAC TGGCTTCCGA      300
AACCGAACAT GTCTGCTTCA TGCAAGGAGA TAGTGGACTC CTACCTCCCT GTCATCCTGG      360
ACATCATTA AGGAGAAATG AGCCGTCCTG GGGAGGTGTG CTCTGCTCTC AACCTCTGCG      420
AGTCTCTCCA GAAGCACCTA GCAGAGCTGA ATCACCAGAA GCAGCTGGAG TCCAATAAGA      480

```

TCCCAGAGCT	GGACATGACT	GAGGTGGTGG	CCCCCTTCAT	GGCCAACATC	CCTCTCTCC	540
TCTACCTCA	GGACGGCCCC	CGCAGCAAGC	CCCAGCCAAA	GGATAATGGG	GACGTTTGCC	600
AGGACTGCAT	TCAGATGGTG	ACTGACATCC	AGACTGCTGT	ACGGACCAAC	TCCACCTTTG	660
TCCAGGCCTT	GGTGGAACAT	GTCAAGGAGG	AGTGTGACCG	CCTGGGCCCT	GGCATGGCCG	720
ACATATGCAA	GAATATATC	AGCCAGTATT	CTGAAATTGC	TATCCAGATG	ATGATGCACA	780
TGCTCGAG						788

(2) INFORMATION FOR SEQ ID NO:317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 214 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:317:

GAATTCGGCC	AAAGAGGCCT	AAATCATCCT	GATGATGGT	TTCTTACATA	AACATGAGCT	60
TCTGACCATG	TACCATGGAT	GGGTTCTCAC	TTCTGCTAT	ATCCTGATCA	TCACTATTGC	120
AAATATTGCA	AATTTGGCCA	GTACTGCTAC	TGCAATCACA	ATCCAAAGGG	ATTGGATTGT	180
TGTTGTTGCA	GGAGAAGACA	GAAGCAAAC	CGAG			214

(2) INFORMATION FOR SEQ ID NO:318:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:318:

GTTGTCTTTT	TTCCCCTTTA	TAGCTGCTGG	AGTGAATTTT	AGAAAGCCTA	AGTCATACAT	60
CACATTGCTT	CATGGGCATC	CCAGTACACT	TTGGATTTTA	TTTTACATCC	TTACTGATCT	120
GATTCTCATC	TCTGTCTCTT	CATGGTTCTC	TGCCTTCTAG	TTACTGCTGT	GACCTTTCAA	180
AACCTTTACC	ACATTGAGTT	CATTCTTAC	TTTTCACTCT	TTCTCTGCCT	GGAGTGTTC	240
GCCCCATCTT	TACGTGGCAC	GCTCGAG				267

(2) INFORMATION FOR SEQ ID NO:319:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:319:

GAAGCTTTCA	GGCTATCTTC	TAGTCAAGAT	GAGTGATAAG	CCAGACTTGT	CGGAAGTGGA	60
GAAGTTTGAC	AGGTCAAAAC	TGAAGAAAAC	TAATACTGAA	GAAAAAAAT	ACTCTTCCCT	120
CAAAGGAAAC	TATCCAGCAA	GAGAAAGAGT	GTGTTCAAAC	ATCATAAAAT	GGGGATCGCC	180
TCCCAACAGC	AGATTTGAC	ATTACCTGAG	AGTCTTGATT	TTAGGCTTGT	TTTTGTAAA	240
CCCATGTGTT	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:320:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:320:

```

GCTGCGTGTG ATGGAGACCA AACCCGACAA GGCAGTGTCC ATCATTGAGT GTGACATGAA      60
CGTGGACTTT GATGCTCCCC TGGGCTACAA AGAACCCGAA AGACAAGTCC AGCATGAGGA      120
GTCGACAGAA GGTGAAGCCG ACCACAGTGG CTATGCTGGA GAGCTGGGCT TCCGCGCTTT      180
CTCTGGATCT GGCAATAGAC TGGATGGAAA GAAGAAAGGG GTAGAGCCCA GCCCCTCCCC      240
AATCAAGCCT GGAGATATTA AAAGAGGAAT TCCCAATTAT GAATTAAAC TTGGCGCGCT      300
CGAG                                         304

```

(2) INFORMATION FOR SEQ ID NO:321:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:321:

```

GAATTCGGCC AAAGAGGCCT ACTCTTACAC CTTCCGCTCC GTGGGCACCT TCAATATCAT      60
CGTCACGGCT GAGAAGCAGG TGGGCTCCGC CCAGGACAGC ATCTTCGTCT ATGTCCTGCA      120
GCTCATAGAG GGGCTGCAGG TGGTGGGCGG TGGCCGCTAC TTCCCCACCA ACCACACGGT      180
ACAGCTGCAG GCCGTGGTTA GGGATGGCAC CAACGTCTCC TACAGCTGGA CTGCCTGGAG      240
GGACAGGGGC CCGGCCCTGG CCGGCAGCGG CAAAGGCTTC TCGCTACCG TGCTCGAG      298

```

(2) INFORMATION FOR SEQ ID NO:322:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:322:

```

GCGCCGTGTC CTTTTCGTT GGTACCAGCG GCGACATGAC GGGGTACACT CCGGATGAGA      60
AACTGCGGCT GCAGCAGCTG CGAGAGCTGA GAAGGCGATG GCTGAAGGAC CAGGAGCTGA      120
GCCCTCGGGA GCCGGTGCTG CCCCCACAGA AGATGGGGCC TATGGAGAAA TTCTGGAATA      180
AATTTTGGGA GAATAAATCC CCTTGGAGGA AAATGGTCCA TGGGGTATAC AAAAAGAGTA      240
TCTTTGTTTT CACTCATGTA CTTGTACCTG TCTGGATTAT TCATTATTAC ATGAAGTATC      300
ATGTTTCTGA AAAACTCGAG                                         320

```

(2) INFORMATION FOR SEQ ID NO:323:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:323:

```
GCAAAAATCT CAGGCCCCAG AAAAGCCTCT TGTCATCTCT CAGATGGGTT CCAAAAAGAA      60
GCCCAAAATT ATCCAGCAAA ACAAAAAGA GACCTCGCCT CAAGTGAAGG GAGAGGAGAT      120
GCCGGCAGGA AAAGACCAGG AGGCCAGCAG GGGCTCTGTT CCTTCAGGTT CCAAGATGGA      180
CAGGAGGGCG CCAGTACCTC GCACCAAGGC CAGTGGAAACA GAGCACAATA AGAAAGGAAC      240
CAAGGAAAGG ACAAATGGTG ATATTGTTCC AGAACGAGGG GACATCGAGC ATAAGAAGGA      300
ACTCGAG                                     307
```

(2) INFORMATION FOR SEQ ID NO:324:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:324:

```
GCACTTCTGA GAGGATGCTG GGAATCTGCA GGGGGAGACG GAAATCTTGT GCTGCCTCGT      60
TGAGTCTTCT CTGCATCCCA GCCATCACCT GGATTACCT GTTTCTGGG AGCTTCGAAG      120
ATGGAAGGCC CGTGTCTCTG TCACCGCTGG AGTCCCAGGC ACACAGCCCC AGGTACACGG      180
CCTCCAGCCA GCGGGAGCGC GAGAGCCTGG AGGTGCGCAT GCGCGAGGTG GAGGAGGAGA      240
ACCGCGCCCT CCGCAGGCAG CTCAGCCTGG CCCAGGGCCG AGCCCCACCC ATCCTCGAG      299
```

(2) INFORMATION FOR SEQ ID NO:325:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:325:

```
GAATTCGGCC TTCATGGCCT ACTCCAACT CATGCCCTTG TTTTATCTC TGCCCTTGGA      60
TGGCTGTCTT CTATTTTCAC TCACAATTC AACACATTTT GACTTGCTCG TGTCACCTAG      120
GGTTTCCGCC TCAGGTATGT CTTCTTCCTT AATTTCTTTG CCGTCTTTGG TGCTGTTGAC      180
CTCACCTTT CTGGGTCTT CCTATTGGTC TCAGCTTCAG GTTTGCAGCC GCCCTGGTT      240
TCCTGAACAT TCCTTCTGTG GGTCTTCCC CTCCTTCTCA CCCACCCTCG AG      292
```

(2) INFORMATION FOR SEQ ID NO:326:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:326:

GAATTCGGCC	TTCAGACTTG	AAGTGGAGAA	GGCTACGATT	TTTTTGATGT	CATTTTGTGT	60
AAGGGCGCAG	ACTGCTGCCA	ACAGAGTGGT	GATAGCGCCT	AAGCATAGTG	TTAGAGTTTG	120
GATTAGTGGG	CTATTTTCTG	CTAGGGGGTG	GAAGCGGATG	AGTAAGAAGA	TTCTGTCTAC	180
AACTATAGTG	CTTGAGTGGA	GTAGGGCTGA	GACTGGGGTG	GGGCCTTCTA	TGGCTGAGGG	240
GAGTCAGGGG	TGGAGACCTA	ATTGGGCTGA	TTTGCTGCT	GCTGCTAGGA	GGAGGCCTAG	300
TAGTGGGGTG	AGGCTTGAT	TAGCGTTTAG	AAGGGCAAAC	TCGAG		345

(2) INFORMATION FOR SEQ ID NO:327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:327:

GAATTCGGCC	TTCATGNCCT	ACCTTTCCGT	CCGTTCTTTC	ACGCCTTCCT	CCTCATTTTC	60
CTTCCTTCTA	TTTTCCCTTC	CCTCTTCCG	CTTCCTGCC	CCGTTTCCTT	CCTCCCTCCC	120
TTCCTCCTTC	CTTCCTTCCT	CTGCGTTCTT	CCTCTCTCCT	TTGTTCCCTC	CTCCTCCTCC	180
CCACTCCCTT	TTCCTCTCCT	CTTCCACCC	CAGTCTCCTA	CTCCCCAGTC	CTCCCATCCC	240
CATGGAACAT	ACACCTGCTT	TGTCTGGGAG	CCACGTTATT	CCTGCCAGCC	AGACCCCTGGC	300
CAGGAGGATC	AGGGTCACGG	TCAGCTTGGG	CCGAGAACCC	ATCACATGAG	ACAAGCTCCT	360
CTGCCAGGGT	TTCCTGTGGG	AAAGGCCCCA	CTTCCCGACC	CTCCTGGGCC	ACTGCATGGG	420
GTCCCTCTT	CGGCTTCTTC	TCCCCTCTCC	ACCCGGCAGC	CCCCCAGCT	CGAG	474

(2) INFORMATION FOR SEQ ID NO:328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:328:

GAATTCGGCC	AAAGAGGCCT	AATTTACTCC	CCAATATAAA	ACATTTTACC	TGCGATCTAT	60
GTGTACATAT	TGAATGATGT	GTAACAATAT	CATAATTTTT	ATGTTCTGCA	TTTTTTCACT	120
TATATATCTT	TATTTAAATG	GACTTAACTT	TACTAATGGA	GTAATTTTGA	GCTTTCAGAA	180
GGAGTTCTCA	CTCGAAGATA	AAGAACAGCT	CGCTAACCAC	GAAAGAGGAA	TCGATGCTCA	240
GCTTTTAGTT	GCACTTCCTA	AAGTTGCAGA	ATTAAGACAA	ATCTTTGAAC	CAAAGAAGAA	300
AGAATTCTTA	GAAATGAAAA	GAAAAGAAAG	AATTGCCAGG	CGCCTGGAAG	GGATTGAAAA	360
TGACACTCAG	CCCATCCTCT	TGCAGAGCTG	CACAGGATTG	GTGACTCACC	GCCTGCTGGA	420
GGAAGACACC	CCTCGATACA	TGAGAGCCAG	CGACCCTGCC	AGCCCCCACA	TCGGCCGATC	480
AAATGAAGAG	GAGGAAACTT	CTGATTCTTC	TCTAGAAAAG	CAAACTCGAT	CCAATACTG	540
CACAGAAACC	CTCGAG					556

(2) INFORMATION FOR SEQ ID NO:329:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:329:

GAATTCGGCC	AAAGAGGCCT	ACAAAACCAT	CCATAAATAA	ACAAAGCTAA	GAAAGCTAAG	60
AAACAAAGCT	AAGAAACAAA	GACTGAGGTG	AGGGAGATTT	GAGTATTTTT	TTTTCCTCTA	120
CCAACAAGTG	AAGAATTGAA	CACCTTAATC	CATCTGATCT	CCCAGGTGGA	AGCCACAAAT	180
CTTTTTTTTT	GTTTGTCTCA	GCATATTGGC	ACAGTGAGAA	ATTCATTTTA	TACTCTCTGG	240
CATCTCTCTT	GTAAACTCAC	CAAGTCTCAA	TAAGTTCACA	AAGAAGGCAG	AGACAAATAA	300
CCCTAGAATG	CAGGTGATG	TTTATTATG	TATTTTCCTT	GTTACATACC	CACCTATACC	360
CAAGGCCTTT	GCAGAAAAGC	TCGAG				385

(2) INFORMATION FOR SEQ ID NO:330:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 696 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:330:

GAATTCGGCC	AAAGAGGCCT	AGGAAGCAGG	AGTTTATTTT	TATCCTTTTG	TAAGTATTAA	60
CTCGGTAATC	ACAACAAACA	CGGAGCAATC	TCAATGCTGT	TTATCCGGAG	GACAGTCTGC	120
GGGGTCGTGA	CGATTCTTTT	CTTCTTGAAG	TTTTTCCTTT	TCCTGAATCT	CATAATGATT	180
CTTGGCCATG	ATTCTGTCTT	TCAATGACT	GTGGCTTCTA	CTCGAACAAAG	ATCCTTTCCG	240
AGGAGTGGCT	TGCCAAGCAG	CGTGAAGTTG	TCTGCCCCAA	CCAGCAGGAC	CTTCTCCAGT	300
CGAATTCTCT	CTCCACACGC	AAGGTCTAGT	TCATTTCCAA	TTAAGATCAG	GTCTTCAGAG	360
GTCACCTTCC	ACTGGCGGCT	GGCAAAGTGC	ACCACGGCAA	AGAGCCTGCC	ATACTGCCCC	420
GTGACGATCA	TCTCATTAC	TTTCTTCACG	ACCTCTGCAT	GGTGTCTGGT	CTCCTCAACT	480
GGGTCTGGCA	GAACAACTTC	TGGCCAAGGT	GGTGAATCA	GGGATGTTT	AGGAACATAT	540
CCTGGTAGAT	ATGAAGTGCT	CTGTGAATTG	AACCTTCGAG	AAGCAGACCA	AAGGGAGGCT	600
GCTCCGGGCC	CCGAAGGTCT	CAGGATGCTG	TGGCTGCACG	CGGACGCCAG	CCGCCCTAAG	660
GTGACCGTCA	GGGAAGATGC	TGCCATGGCC	GCCGCC			696

(2) INFORMATION FOR SEQ ID NO:331:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 378 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:331:

GAAFTCGGCC	AAAGAGGCCT	AATTTTTTGT	ACATCTGGGC	CCTTAGTTTT	TATCTGTTT	60
ATTATATGTC	TCTGTCTCTC	TCTATTGTGT	GTGTGTGTGT	GTGTGTGTGT	GTGTGTGTGT	120
GTGTGTGTGT	GTGGTGACAG	AGTGCCACCC	CCAGGGCCCT	GTCAACCTCT	CTTTCTCTCT	180
CCATGGCTGT	CTGCCTGCGT	ATCTGTCTCT	GAGAATCCTC	GGGGCGGTCA	GGGGATGTCA	240
GGAGGGGAAG	GAGCGGCCCT	CCCTATCTTG	CTGCTCTCT	TGGCATCTAG	GGGCACCTTC	300
CATGGAGCCA	GACCGGGTGG	AGGGGCTTCT	GGGATTTGGT	GTCTGCTGCT	GCCAGAGCAG	360

GAACCCCCAG TACTCGAG

378

(2) INFORMATION FOR SEQ ID NO:332:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:332:

GAATTCGGCC	TTCATGGCCT	ACATTGGGAT	TATTGGTGCT	GTGACCATGG	CTGGCATCAT	60
GGCGGCAGAC	AGAAGTGAAT	CACCTAGTTT	GACCCAAGAG	AGAGCCAACC	TGAGCGATGA	120
GCAGTGCACA	CAGGTGACCT	CCTTGTTGCA	GTTGGTTCAT	TCCTGCAGTG	AGCAGTCTCC	180
TCAGGCCTCT	GCACTTTACT	ATGATGAATT	TGCCAACCTG	ATCCAACATG	AAAAGCTGGA	240
TCCAAAAGCC	CTGGAATGGG	TTGGGCATAC	CATCTGTAAT	GATTTCCAGG	ATGCCTTCGT	300
AGTGGACTCC	TGTGTTGTTC	CGGAAGGTGA	CTTTCCATT	CCTGTGAAAG	CAGTGTACGG	360
ACTGGAAGAA	TACGACACTC	AGGATGGACT	CGAG			394

(2) INFORMATION FOR SEQ ID NO:333:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 547 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:333:

GAATTCGGCC	AAAGAGGCCT	ACTTATTTTC	CTGTGAAAAT	GCCTACCACA	AAGAAGACAT	60
TGATGTTCTT	ATCAAGCTTT	TTCACCAGCC	TTGGGTCCTT	CATTGTAATT	TGCTCTATTC	120
TTGGGACACA	AGCATGGATC	ACCAGTACAA	TTGCTGTTAG	AGACTCTGCT	TCAAATGGGA	180
GCATTTTCAT	CACCTACGGA	CTTTTTCGTG	GGGAGAGTAG	TGAAGAATTG	AGTCACGGAC	240
TTGCAGAAC	AAAGAAAAAG	TTTGCACTTT	TAGAGATACT	GAATAATTCT	TCCCAAAAAA	300
ACTCTGCATT	CGGTGACTAT	CCTGTTCTCT	GTCCTGAGTT	TGATCACGTC	GCTGCTGAGC	360
TCTGGGTTTA	CCTTCTACAA	CAGCATCAGC	AACCCTTACC	AGACATTCTT	GGGGCCGACG	420
GGGGTGTACA	CCTGGAACGG	GCTCGGTGCA	TCCTTCGTTT	TTGTGACCAT	GATACTGTTT	480
GTGGCGAACA	CGCAGTCCAA	CCAACTCTCC	GAAGAGTTGT	TCCAAATGCT	TTACCCGACT	540
CCTCGAG						547

(2) INFORMATION FOR SEQ ID NO:334:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:334:

GAATTCGGCC	TTCATGGCCT	AGGGGAAATT	GAGTCAAGAA	AAGGTTCAAT	ATTTTTTAAT	60
GGTAGAATTG	ACCGTATGTG	TATGTGCTTC	TAGAAGTGAT	TCAGGAGAGA	GGGTGGAATG	120

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GATGGTGTGG GACGGAGGGA AGAATTGGTG GAATGATGTT GGCAAAAAGG AATAGGCTTT 180
TGTGCATAAG TTGAGGGATT GGCCTTGCCT AGAAACATGG ACAATTCGTC TATAGTAAGA 240
AGAGAAAAGG TAGATCTATG ACCACAGACA TAGTCAGATA ATCATTTTAA AATTCTTTAA 300
TCAATAGATG TTTCTGATGT ATGGCAGGCA GTAAGCTAAG CAGTTTACAT ACCTGATTTC 360
ATTTAGTTAT TATAACAATC CCAGTCTAAA ACTCGAG 397

```

(2) INFORMATION FOR SEQ ID NO:335:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:335:

```

GAATTCGGCC TTCATGGCCT ACTCCATCCT TAAGGTCACC ATTGGTATGT TCCTGCTCTC 60
TGGAGATCCC TGCTTCAAGA CGCCACCATC GACTGCCAAG TCCATCTCCA TCCCAGGCCA 120
GGATTCTCTC CTGCAGCTGA CGTGTAAGGG TGGTGGGACC AGCAGTGGGG GCAGCAGCAC 180
CAACTCCCTG ACTGGGTCCC GGGCCCCCAA GGCTCGGCCC ACTATTCTCA GCTCAGGGCT 240
GCCAGAGGAA CCCGACCAGA ACCTGTCCAG CCTGAGGAG GTGTTCCACT CTGGCCACTC 300
CTCGCAACTC GAG 313

```

(2) INFORMATION FOR SEQ ID NO:336:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:336:

```

GAATTCGGCC AAAGAGGCCT AGATTGAATT CTAGACCTGC CTCGGCCTCC CAAAGTGCTG 60
GGATTACAGG CTTGAGCCAC CACACCTGGC CTAGTGATTT GTAATTTTAT GAGCTGTTGC 120
TGTATTGCCT TCCACAGACA GTCAATTTAT AATCCCTCAG TATTATATAA TCAGGAAGAT 180
TCAGTGAATG GAATTTTGGG TTGGTGGAGG ACATATTTTT TAATTGGTAG ACCACTGAGT 240
GCTTTTGCAA ATCTCCTTAA ATCACATTAC AGCAGGAACA ACTATAGAAA ATACAATTAT 300
TTAGGAGCAA CCTGATCTGT GAGCTAATTT AATGAGTGGA GCCCAGCCTA CATGCTGAAG 360
AGCTCACATG CCTCCTACCT AGTTCCTTAA CTAGGTTTTC ACTCATGCCC ATTTTGTCTAT 420
ACTCTTGAAA CCTTCCTATC TTTGCATAGA ACATTATTCT TTCCACT 467

```

(2) INFORMATION FOR SEQ ID NO:337:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:337:

```

GAATTCGGCC AAAGAGGCCT ACTTCTTTGA AGAACCATGA AGTCACACTA TATTGTGCTA 60

```

```

GCTCTAGCCT CCCTGACGTT CCTGCTGTGT CTCCCCGTGT CCCAGAGCTG TAACAAAGCA    120
CTCTGTGCCA GCGATGTGAG CAAATGCCTC ATTCAGGAGC TCTGCCAGTG CCGGCCTGGA    180
GAAGGGAAGT GCCCCTGCTG TAAGGAGTGC ATGCTGTGCC TCGGGGCCCT GTGGGACGAG    240
TGCTGCGACT GTGTCCGTAT GTGCAACCCT CGGAATTACA GCGACACCCC GCCACATCC     300
AAGAGCACCG TGGAGGAGCT GCACGAGCCC ATTCCGTCCG CTGTCGAG                    348

```

(2) INFORMATION FOR SEQ ID NO:338:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 259 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:338:

```

GAATTCGGCC TTCATGGCCT AGCCAGTCTT CAGTTATAAC CACTCCACCC TCCTCACTTT    60
CTCTCTCTCT CTCTCTTTT TTTTCTTTT TTTTGTGCTA TGGGATTTAA TGGGAAAAAT    120
ATGTAAAAAC TGTCACTAGT CAGCTGGCTC TTTTCTCTAT GAAATCTATC AGTACCTTTC    180
TCCATCCGTT GTTCTCAATA ATGACCACAG AGCCTGAGTA TACCAAGAAA ACCAATATTTC    240
GCATTACAGG TCACTCGAG                    259

```

(2) INFORMATION FOR SEQ ID NO:339:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 183 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:339:

```

GAATTCGGCC AAAGAGGCCT AGCCTTCTGC AAGATGCTTC TGATTCTGCT GTCAGTGGCC    60
CTGCTGGCCT TCAGCTCAGC TCAGGACTTA GATGAAGATG TCAGCCAAGA AGACGTTCCC    120
TTGGTAATAT CAGATGGAGG AGACTCTGAG CAGTTCATAG ATGAGGAGCG TCAGGGACCA    180
CCT                                         183

```

(2) INFORMATION FOR SEQ ID NO:340:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 264 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:340:

```

GAATTCGGCC TTCATGGCCT AGTTTAACT GAGTGCAACA AGTATTTTCG TTAAGAGATT    60
TTTTTTCGTA ATTTACCATT CTGCTGAATC AATTTTAAAT CCAGTTGGAA GCTCTAAAAT    120
TCTAACATAA TTCAGAAGCA TTAAAAAAGA AGACTAAGGA AGAGAAAGCT ACATTTTAT     180
TTCAGCTTGT ATTGCATTGT GCAGAAAGGA AAATAGTCTA GCTAATTTAC TTTTCCTATG    240
AAAAACCTTA GAAGGCTCCT CGAG                    264

```

(2) INFORMATION FOR SEQ ID NO:341:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:341:

```

GAATTCGGCC TTCATGGCCT AGCCTTTCTA GTCTTCCCTC TTCTGTAGGA ATANCATGTT      60
CCTCAAATGG TCCTGAACCT TTTCACCATT TTGGTGAACC CTTTAAAGT AAATTTACTC      120
AATGCTTTAA AATTCATAGT CTTAAAATAA ATGTGAATTT TGTTCAGG TATTATTCT      180
GGGGTACAAA AACTTCCCAG AATTTACAGT AGGAAAGGAA ACCCCTTAT GATGTGGCTT      240
ATTATTACAA GCATTGAGAA ATGATGCTGG CTAAGTCAAA TCATTCTTG AGACAGTGAT      300
TCCTAAATGT AATGCCGCCT TCCTGAACTC TCACATATTC TATATCATGG TTATTTTAAA      360
AAATATATTT TTAGCCTTTT GTAACCTTAG TCTGTGTTTG AGCAATCTCG AG          412

```

(2) INFORMATION FOR SEQ ID NO:342:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:342:

```

GAATTCGGCC TTCATGGCCT AGGGAATTATA GGTGTGAGCC ACCGCGCCCG GCCAGGAATC      60
ATTTTTATCC AGGTAAGGCA TACAGAACCG GAGGGTTCTT GTCTAAGTTG TACCATGAAT      120
GTGTGCTCAG TGGCTACTTT GAAATAGACT TACTGTACAA TCCCTGAGCA GGAATGAAAA      180
TAAAAGCTGG AAATCACGGG TTGCTCTGGG GTTTTCAGGA AGGTGTCGCT CGTCTGGGGT      240
GAGTGTCTTC CTTTCTCANG GGATTTCATG TGGCATTATT TTGTTTTCAT CTGAGAGGCA      300
ACATAAGCTG GGAGGGAAGG GCTGCAAAGA GGGGGCCAGG ACAAATGTGT ACCTGGGGGC      360
CCCCATTTTG ACTCCACCCT GAGCTGGGGC TGGGCCACAG GAGGGCAGAG GGAACACTTT      420
GGGACGGGGA GGGAGCCCCT GGAATGAAAG AATGGGGTGA CTCGAG          466

```

(2) INFORMATION FOR SEQ ID NO:343:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:343:

```

GAATTCGGCC TTCATGGCCT AGAATTTTGG AGTCTTTATC ATAGGTAACC TGGACCACAG      60
TTACTATTTA TTGACAAATG GATTGAGTGT ATGGAGGAAA GCACAGTGA TGCTAGGCTT      120
TGTAATATG GGGATGTAGA AAAGCAGATA GTTCAGTGTC TACCTTTTTC TAGAACTACC      180
TTGAACCTTA AATTTTAAGT CATGTTTATT GCTAGAAAAT TAAATGTACT TATTTAAACC      240
AATGAAAAAG CACATTTCTG AAATGAAGTT AGAGATAATC TCTGTGTCTT ATAAAAAGAC      300
ATTAATAAAA ATCTGGTAAG GACTCGAG          328

```

(2) INFORMATION FOR SEQ ID NO:344:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:344:

```

GAATTCGGCC TTCATGGCCT AGTGACCAGA CATAAGAACT CATTTTTAGT TAAAGCATTT      60
TAAAAAAGTA TACAAGGCAG AGTTGCAAAC AATCTCAGCC TATGAAAAGG ACAGCTGCAG      120
TCAATGTTCC CACTAATATT TTCCATCCGT GTACTGAGTG AATTTGTAAT GTGCAACTCA      180
TGTCAGAGAA ATAAACAGAT GTGCACCACA AGCGGAACAA CAATGAAAGA ACTTACATAG      240
ATTTTATTA AGATTGAACT TTTGATGTTG ATTCCACTGG TAAGAGAGCA CTGTAGGCAA      300
AGGTCTTGTA TTTATAAAGT TATCTCCTAT TGAGGAAGAT GAAGATGTCA ATACTCCCCA      360
ACAGAATGCT TTGAGCTCTT TCTAGTAGAT CTGTGCCAAC TCTGAAACAC CTCGAG      416

```

(2) INFORMATION FOR SEQ ID NO:345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:345:

```

GAATTCGGCC TTCATGGCCT AGTAAATACA AAATACAAA ATACTGGTGA GAGAATGGGA      60
TGATGATTAT ATTCTGGTT CAGTTTTTCT TCCTGAGAAA TTTGATAATA CATCTTTTGA      120
TTTTTAATAA GTGAAATAAC TGGTGACTGT GTTGTATGTG TGTGTGTGTG TTTTTTTTTT      180
TTTTTTTAAA TAGAAGTGTG AAAAGAACT TCATCCACGG AAAC TTCAGG ATAATTTTGA      240
AACAGGCAAG TCATTTCCTA TCTTTTTATA ATCTCTGCCT TGTGGGATTT GGTGTTGGTTT      300
ACCTAACTTT GATTTTAGTG GGAGTATGTG AGCTGTGACT CGAG                        344

```

(2) INFORMATION FOR SEQ ID NO:346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:346:

```

GAATTCGGCC TTCATGGCCT AGCCTTCGGA ACCCCACCAG AGTCACAGCC AGGAAGGGCA      60
GCGGGGCGCA CCAGGCCGAA GGCTCACGCC ACAGGGAGGG CAGCTAGGAC ATGGGGGGAA      120
GCGCGTTAAA CCAGGGAGTC CTGGAAGGGG ACGACGCCCC CGGCCAGTCC CTGTACGAGC      180
GGTTAAGTCA GAGGATGCTG GACATCTCGG GGGACCGGGG CGTGCTGAAG GACGTCATCC      240
GAGAAGGAGC TGGAGACCTA GTGGCGCCTG ATGCTTCGGT GCTAGATGCT TCGTCTTGGG      300
TAAACTCCTC GACTCCCAAG GCCCCAGCTC CATCTTTACC TCAGAGCCTC CTGAACCTCC      360
TCCTCCAGCC TCACCTTCCT CCAGCTCAC CACTCCTCCC TGGACCTGCA GCTCCGCACC      420
CCCGGGGGCC TCAGAACTAC CCCTTCAGG GCCTCAGAAC TACCCCTACG GTTTCCTCCTG      480

```

CGTAACCTTC TGCCTACCTT CCTGAGAGTG GTTGGTGACA GCAGCCGGGG CTAGAAACCT 540
CGAG 544

(2) INFORMATION FOR SEQ ID NO:347:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 570 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:347:

GCCTTCATGG CCTACCCAGT GATTGTCAAC ATGGCCAGCA AGAGGAAATC CACCACACCA 60
TGCATGATCC CAGTGAAGAC TGTGGTGTG CAAGATGCCA GCATGGAGGC CCAGCCCGCT 120
GAGACCTTGC CTGAAGGACC CCAGCAGGAT CTGCCCCCAG AAGCATCTGC TGCCAGCAGT 180
GAGGCAGCAC AGAACCCAG CAGTACTGAT GGCTCTACAC TGGCCAATGG GCATCGGAGC 240
ACTTTAGATG GCTATTTATA TTCCTGTAAA TACTGCGATT TCAGATCCCA TGACATGACC 300
CAATTTGTGG GACATATGAA CTCAGAGCAC ACAGACTTTA ATAAAGACCC AACCTTTGTA 360
TGCACTGGGT GCAGTTTCTT GGCAAAAACC CCTGAGGGGC TTTCTTGCA CAATGCCACA 420
TGCTACTCCG GGGAGCCAG CTTTGTGTGG AACGTGGCCA AGCCAGACAA TCATGTGGTT 480
GTGGAGCAGA GCATCCCTGA GAGCACCAGC ACTCCTGACC TAGCGGGTGA GCCCAGTGCT 540
GAAGGGGCTG ATGGACAGGC AGAGCTCGAG 570

(2) INFORMATION FOR SEQ ID NO:348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:348:

GAATTCGGCC TTCATGGCCT AGAAAAAGT TTTCAAAGGG AAGTAATCTT AAATCTGTAT 60
ACTATTTTCT ATGATGGAAA TTCTGTGAAG AAACAATAAC AAATTCTCCC TGACTCTGTG 120
CTGTCCTAAT AGTAAGGTGG TCTTTCTTCT AATCTCCCCA TCCATCCACC CATCAGGAAG 180
CAACAGGGTA CCTTGTGTGA GTAACGTAG ATTCTGACT TCTTCTCGCA CCTTCAGCTG 240
GAGCACCTGT TGTAAGATGT GCTGCCGGAG GTTCTCTGGA GCAATCCCCA TTCGCTCGAG 300

(2) INFORMATION FOR SEQ ID NO:349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:349:

GAATTCGCCC TTCATGGCCT AACAAACCACC ACCACCTGGA CGCCAGCAG CACAACCACC 60
ATAGCCGGCC TCAGGGTCAC AGAAAGCAAA GGGCACTCAG AATCATGGCA CCTAAGTCTG 120
GACACTGCCA TCAGGGTTGC ATTGGCTGTC GCTGTGCTCA AAAGTGTCT TTTGGGACTG 180

CTGTGCCTCC TCCTGTGGTG GAGGAGAAGG AAAGGTAGCA GGGCGCCAAG CAGTGACTTC	240
TGACCAACAG AGTGTGGGA GAAGGGATGT GTATTAGCCC CGGAGGACGT GATGTGAGAC	300
CCGCTTGTGA GTCCTCCACA CTCGTTCCCC ATTGGCAAGA TACATGGAGA GCACCCGTGAG	360
GACCTTTAAA AGGCAAAGCC GCAAGGCAGA AGGAGGCTGG GTCCTGAAT CACCGACGCT	420
CGAG	424

(2) INFORMATION FOR SEQ ID NO:350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:350:

GAATTCGGCC TTCATGGCCT AATTAGATTA TTTGAGCTT GGAACACTT GTACATGGTT	60
CCCCGGGACA TAAATGTAGA AGTCTGTAG AGCAGTATCT TCACATTGAG GGATGTGAAG	120
GCTTTGCAGA GTATAGATAG TTTAATGTAA TTTAGAGTTC TTCATTATCT TTCCTAGGAT	180
CAGATATCTG CCGATGATGA CTTCTAACCC ATTGAGAATC TTTCTATGGT ATATTGCCTT	240
GGGGTGTAAT ATCCTCCAGG ACCCTAAACA GATGGACAGT TGATGCATTT CAGGGTAAGC	300
TGTAGACAAC AATATATTTG ACCCCTGAAA CAATTCAGTA TGCTTGTCAT TTGTTAACTA	360
GAGTTATTTT AAACATAATT TTGAATAAAA AATAAATTTT AATAAATACA TGTCCCAAT	420
TATGCATATA AAAGCAATCC TCGAG	445

(2) INFORMATION FOR SEQ ID NO:351:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:351:

AATTCGGTTC ATGGCCTAAT TTTGGAAC TAAGACAGAT TTTTGTGTTT TGTGTTTTTA	60
AATAGCTGTT AACTAGTCTC ATAAGGACAA AATACAGAAA GACAGTTCTT ACAGAGAAAT	120
AGAAGCAAAA AAAGGAACCA ATGGAAAATT TAAACTGAA AATAGAATA TCTGAAATAA	180
AAAATTCACT AGATGACATA ACTGTTGAGG AAAGAGTATG TGAATTGAA GAAAGAGCAA	240
TAGAAATGTT CCATTGTAAA GAACAAAGAG AACTCGAG	278

(2) INFORMATION FOR SEQ ID NO:352:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:352:

GAATTCGCCT TCATGGCCTA CAGATTATCT TACTGTAAC TGATCAAGTA CTTGAAAAAT	60
GACTTCGAAA TTTATCTTGG TGTCTTCAT ACTTGCTGCA CTGAGTCTTT CAACCACTT	120

TTCTCTCCAA	CCAGACCAGC	AAAAGGTTCT	ACTAGTTTCT	TTTGATGGAT	TCCGTTGGGA	180
TTACTTATAT	AAAGTTCCAA	CGCCCCATTT	TCATTATAT	ATGAAATATG	GTGTTCACGT	240
GAAGCAAGTT	ACTAATGTTT	TTATTACAAA	AACCTACCCT	AACCATTATA	CTTTGGTAAC	300
TGGCCTCTTT	GCAGAGAATC	ATGGGATTGT	TGCAAATGAT	ATGTTTGATC	CTATTCGGAA	360
CAAATCTTTC	TCCTTGGATC	ACATGAATAT	TTATGATTCC	AAGTTTGGG	AAGAAGCGAC	420
ACCAATATGG	ATCACAAACC	AGATGGCAGG	ACTCGAG			457

(2) INFORMATION FOR SEQ ID NO:353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:353:

GAATTCGGCC	TTATGGCCTA	GCAGGCGCCA	AGGTAACATG	AACAAACAGC	TGCTTGCTGC	60
CCCCAAGCTT	TAGTTTCTAG	TGGGCCTGGA	GCAATTGTGA	AGGACAATC	CACCCAAGGC	120
CCAGTATGA	AGAGGGGTAG	GGTGGGAGGA	TTGTACATAT	CGCGAACGCT	TGGCAAATCT	180
CTAGATTTT	TTTCTCCTA	GGAAATAATA	ATTTTAAAA	AGGCTTGTAA	AAAATAATAA	240
AATGTTTCAT	GACAGCAGCA	GATGTAAAC	TCCAGTACT	CCGGGCGACC	TCGAG	295

(2) INFORMATION FOR SEQ ID NO:354:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:354:

GCCTAGACAT	GATGGTGGCC	ACGTGCCAGG	GGACCACACC	CTATGTACAA	AGCAGGAGAA	60
TGATGCTCCC	AGCTGAGCTG	CAGGATGGGC	GCTGGGCTGA	CTGGAGGGGT	AGACGGGGTG	120
GGGTCTGACC	CCATTAGCCT	TTCCCCATCC	AACCTGGGCC	CCCATAGCC	ATTCTCTGGC	180
CCTCTGCACA	AGACAGACTC	AGCAAATCTG	CGAGGTATGG	GGATTCTGCC	AACTCCCCAC	240
CTCGCCTCAC	CTTCCCTAGG	TCTGCGCGTT	AGGAGATTCT	GGAGCCAGAG	GGAGAGACCC	300
CAGAACTCC	CCGGTCGGCG	ACCCAGCCCG	AGACGCCTGG	GGTCCCAAGG	GAAGCTGAAC	360
GCCCGCAGAA	TGGGGAATG	GAGAGAGAAC	CTGAAAGAGC	CCCTGTAAC	CGAG	414

(2) INFORMATION FOR SEQ ID NO:355:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:355:

GAATTCGGCC	ATCATGGCCT	ACTCCCGAGT	AGCTGGGACT	ACAGGCATGT	GCCACCACGC	60
CCAGCTAATT	TTTTGTATT	TTTTAGTAG	AGATGGGGT	CCACCATGTT	AGCTAGGATG	120

ATTTCGATTT	CCTGACCTTG	TGATCGCCCC	GCCTCGGCCT	CCCAAAATGC	TGGGATTATA	180
GGTGTGAGCC	ACCACGTGGC	CTCATTTTCAT	TCTTTCATGT	GGATAGGCAG	TTGTTCCAGA	240
AGTATATAGT	GAGGAGCTTC	TTCTTTCTCT	AATGATCTGC	AATGTCACCT	TCATCATTTA	300
TGAAGGTGTC	ACATATACAT	GGGAATTTT	TAGTCTGGCA	TTAAATGTTT	TTCAAAAGAG	360
TTCTTGCAAA	CGTTTTTGTT	TTTATTTCTT	ACTGTTCCCT	TCACGTACTC	TCTACTGAAC	420
TAAACTCTCT	AATGTGTCTC	GAG				443

(2) INFORMATION FOR SEQ ID NO:356:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:356:

GCGATTGAAT	TCTAGACCTG	CCTCGAGCTC	AAGAGCAGCC	CACCTGTTCA	GTATTCATAC	60
CCACATATCC	ATAATAGAGC	TCTTCTCTTC	CCCCGGGTTT	CTCTGCCTCA	GCCTTTTCCT	120
CTTAGCAGAT	GCCATCTGCA	GGGCCACTTG	GCTGCCCGTA	GCAGTAACCG	CACAGTCTTC	180
CACATTTACT	CCCTCAGCCT	CAGCTGCTCC	TGCAGCCCAG	GCACTGTCTC	TGTCTCTGCA	240
TTGCTCAAGC	CTCCACCATC	TCGGTTACAC	CCCACAGCCA	CTCGAG		286

(2) INFORMATION FOR SEQ ID NO:357:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 269 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:357:

GAATTCGGCC	TTCATGGCCT	ACTGCCTTAG	CCTCCCAAAG	TGCTGGGATT	ACAGGCGTGA	60
GCCACCATGC	CCAGCCCTAT	AGTAGTTCTT	CTTTTGCCCC	TTAATATCCT	CACCCACATG	120
TCCTGTACCC	TGCCTGAACC	CTCCTCCTCT	TTTGTCTCTG	ATCCTTGAGC	TCCCTAGAGC	180
CCATAATTCT	TTAGAGCAGG	TATGTCCCGA	GTCTGAAACA	TGCCCTTATT	TGTCCCAAGC	240
TCTGGACATT	TCTCACCCCA	TCTCTCGAG				269

(2) INFORMATION FOR SEQ ID NO:358:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:358:

GAATTCGGCC	TTCATGGCCT	ACCAAGGAAG	CCTTTCTGTT	TTTGCCCCAA	GGAGCGTCAA	60
TAAGATCTTT	GAAAATACTT	TGAAGTCATT	TTGTGTGTGT	GTATGTGCAT	ACACACCTGA	120
TTGTTTTTAT	TTTTTATTTT	TATTTTTTGA	GTTAGGGTCT	GGCTCTGTCT	TCCAGGCTAG	180
AGTGCACTGG	TGTGGTCTCA	GCTCACTGCA	ACCTCTGCCT	CCCAGGCTCA	AGCCGCCCCC	240

CCACCTCGAG

250

(2) INFORMATION FOR SEQ ID NO:359:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:359:

GAATTCGGCC TTCATGGCCT AATGGGAGAT TGGTGGGAGT AGGGAACACA AAAGGCATGG	60
GAAAAGAAGA TAGGTTGTAT TTTGGTCATA CTGACACCAA CATGCCTAAA GGATAGCCCT	120
GTGAAAAAAG CTAGCAGACA GTTGAAGTGC GGCTGTGAAA CAGGAAGCCG TGAGGGCTAG	180
ACTCATCGTT GTAGTCATTC GTAAAGAGTA AATACTTGGA GCTATTGTAG TAGATGGTAT	240
CACCACGGAA CACTCGAG	258

(2) INFORMATION FOR SEQ ID NO:360:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:360:

GAATTCGGCC TTCATGGCCT AGGAAGCCAC AGGTCGGCTC TGCATTAGCA GGAGCAGCCG	60
CCCTCGCTGG CCGGGGGCTC CTGGGGTTTG TCCAGCTTGA TGTCGATCAT CCCTTCTTTG	120
CTTTTCTCCT GGACATTCTC CATTCCGGGT AGAGCCGACG CCACACGTCG AAAAAGCTGC	180
TTCACGTGTG AGCCAGTCTT CGCACTGGTC TCAATGAACA TGACGCTCAG TTCTTTGGCG	240
CGCTGCCCCC CCCCTCGAG	259

(2) INFORMATION FOR SEQ ID NO:361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:361:

GAATTCGGCC TTCATGGCCT AAAGATTAGC CTGGGTAACA TAGTGAGACC CTGTCTCTAT	60
TAAAAAATAA TAATAAAAT AACATTACAA TTGGTATTGT TCACTAAGGT ATTGGTTGTT	120
AAGGCATTCA TTAAGGTATT GTTAAACTT GTGTTAAGCA TGTTAAAGTC TCAGTAACTT	180
TGGGATAGAA ATAAATGTG ATAAAAAGCT GAAAGAAACC ACCACAAGG AGAGTCCTTT	240
TTGAAATATT AGAGACATAA TGCTGTCTAA TAAAAAACGA CATCAAAGAA AAACACTACT	300
ACAGTGACTG CAGACTTAAT GTTGGCCAAC CATGCATCCT CCCTAGAAAT GCATTTGAAT	360
TTGATTTACT AATCTTTTAT TTAGGAAATT TACATTTTTA CATTAGTGAG ATTGGCCTCG	420
AG	422

(2) INFORMATION FOR SEQ ID NO:362:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:362:

GAATTCGGCC	TTCATGGCCT	AGTTATTCTT	CTAATAGCTC	AGCTACTTTT	CCTTAAATA	60
TCTTTTCTC	TGCAAGCCT	TCATATAATT	GTTGTTATTA	TAACAGTGAT	GATGACTGCC	120
ACTCATTACA	ACTGCTGTTG	TTAATCTTTG	TTGTTATTTT	AAACCATATG	TTATTTAAAC	180
CATAAACTGC	ATCATAAAAG	CAGTTTCTTT	CTAATCCATG	ATGACACCTG	CTAGCCAGGT	240
ATCGTATCAA	TTCTTCACAG	GTCTATTGAA	TTCTAGACCT	GCCTCGAG		288

(2) INFORMATION FOR SEQ ID NO:363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:363:

AAAAATTCA	ACAAATCCTG	AAGTCTTCT	GTGAAGTGAC	CAGTTCTGAA	CTTGAAGAT	60
AAATAATTGC	TGTAAATTCC	TTTGATTTT	CTTTTCCAG	GTTTCATGGTC	CTTGGTAATT	120
TCATTTCATGG	AAAAAAATCT	TATTATAATA	ACAACAAAGA	TTGTATATT	TTTGACTTTA	180
TATTTCTGA	GCTCTCCTGA	CTTTGTGAAA	AAGGGTGATG	AAAATGCATT	CCGAATCTGT	240
GAGGGCCCAA	AACAGAGACT	CGAG				264

(2) INFORMATION FOR SEQ ID NO:364:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:364:

GAATTCGGCC	TTCATGGCCT	AGACCCTCAT	CAATAGATGG	AGACATACAG	AAATAGTCAA	60
ACCACATCTA	CAAAATGCCA	GTATCAGGCG	GCGGCTTCGA	AGCCAAAGTG	ATGTTTGGAT	120
GTAAAGTGAA	ATATTAGTTG	GCGGATGAAG	CAGATAGTGA	GGAAAGTTGA	GCCAATAATG	180
ACGTGAAGTC	CGTGAAGGCC	TGTGGCTACA	AAAAATGTTG	AGCCGTAGAT	GCCGTCGGAA	240
ATGGTGAAGG	GAGACTCGAG					260

(2) INFORMATION FOR SEQ ID NO:365:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:365:

GCGCCTATCA	CAAGCAGATC	ATGGGTGGCT	TCAAGGAGAC	GAAGGAGGCT	GAAGATGGCT	60
TCCGCAAGGC	CCAGAAGCCT	TGGGCCAAGA	AGATGAAGGA	GCTGGAGGCA	GCCAAGAAGG	120
CCTACCATTT	GGCTTGCAAA	GAGGAAAAGC	TGGCCATGAC	ACGGGAGATG	AACAGCAAGA	180
CGGAGCAATC	GGTCACACCT	GAGCAGCAAA	AGAAGCTGCA	GGACAAAGTG	GACAAGTGCA	240
AGCAGGATGT	GCAGAAGACA	CAGGAGAAAGT	ATGAGAAAGT	GCTGGAAGAT	GTGGGCAAGA	300
CCACACCCCA	GTACATGGAG	AACAACTCG	AG			332

(2) INFORMATION FOR SEQ ID NO:366:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:366:

GAATTAACAG	AGTTTTCAGA	ATTAGAATAC	TCAGAAATGG	GATCATCGTT	CAGTGTCTCT	60
CCAAAAGCAG	AATCTGCCGT	AATAGTAGCA	AATCCTAGGG	AAGAAATAAT	CGTGAAAAAT	120
AAAGATGAAG	AAGAGAAGTT	AGTTAGTAAT	AACATCCTTC	ATAATCAACA	AGAGTTACCT	180
ACAGCTCTTA	CTAAATTGGT	TAAAGAGGTT	GAAAGTTGTG	CTTCAGAAAA	AGCAAAAGAC	240
AGTTTTAATG	AAAAGAGAGT	TGCAGTGGAA	GCTCCTATGA	GGGAGGAATA	TGCAGACTTC	300
AAACCATTTG	AGCGAGTATG	GGATCTCGAG				330

(2) INFORMATION FOR SEQ ID NO:367:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 200 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:367:

GCGATTGAAT	TCTAGACCTG	CCTCGAGTAC	GGAGCGAAAC	TCTGTCTCAA	AAAAAAAAAA	60
AAAAAAAAAA	ACCGAGTATA	AAAGGCATTT	TTTCCTTTA	AACTAAGTAA	AATATAATGT	120
TGAATAGTTC	TATTTTGCTT	AACGGGCTTT	TGTTATTGT	TTTGGTAGA	AATTGGCATT	180
TTTCACATAG	AAATCTCGAG					200

(2) INFORMATION FOR SEQ ID NO:368:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 368 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:368:

GAATTCGGCC	TTCATGGCCT	AGAGAAATGA	GGAAAAAGAA	GGAAGAATAT	TTAACTTTTA	60
GTCCTCTTAC	AGTTGTAATA	TTTGTGGTCA	TCTGCTGTGT	TATGATGGTC	TTACTTTATT	120
TCTTCTACAA	ATGGTTGGTT	TATGTTATGA	TAGCAATTTT	CTGCATAGCA	TCAGCAATGA	180
GTCTGTACAA	CTGTCTTGCT	GCACTAATTC	ATAAGATACC	ATATGGACAA	TGCACGATTG	240
CATGTCGTGG	CAAAAACATG	GAAGTGAGAC	TTATTTTCT	CTCTGGACTG	TGCATAGCAG	300
TAGCTGTTGT	TTGGGCTGTG	TTTCGAAATG	AAGACAGGTG	GGCTTGGATT	TTACAGGATA	360
TTCTCGAG						368

(2) INFORMATION FOR SEQ ID NO:369:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:369:

GAATTCGGCC	TTCATGGCCT	ACATTCGGAG	AAGTTGAAAG	AATTACACCC	AGAACACCCA	60
TGTCTACCAT	GTTACTACAT	TTGTGTGTGT	GTGTGTGTGT	GTGTGTGTGT	GCGTGTGCAA	120
TTTAAATTAC	AATGGTCGAG	GAAGCTCTTG	CTGAGAAGGT	GATGTTGAAT	AAAGACTCTA	180
AAGACCCCTAA	AGAGTTGAGA	GAGAGCTGTG	TGGAGTTCTG	GGGCCCAGGC	ACAGCAAGTA	240
CAAAGATCCT	GAAGCAGGAG	CATTCTTGGT	GTGTTCAAGG	AAAGCAGGAC	AACCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:370:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:370:

GAATTCGGCC	TTCATGGCCT	ACCGCCTTTC	CATTATGCAA	CTGTGGTGGC	TTTTCTTTTG	60
TTATACGACG	ATTATTGTGC	AACCCCACTA	TCTTTGCACT	CAACCATGGG	CCCCCTGGGC	120
TCAGAGACCT	CGTGACAGTC	ATCTTCTCAT	CACCACATCT	GCAAATGTGT	GGGTGGATGG	180
GGCAGCAACA	GTCCACCTCC	TCCAAGAAGC	AGTCCCTGAT	TTTTCTCTCC	CAGACAAATC	240
TTCTGCTCTC	TGTTCTTGA	AACTCAAAGA	ACTAAGCACC	TCCCTCGAG		289

(2) INFORMATION FOR SEQ ID NO:371:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:371:

```

AATTCGGCCT TCATGGCCTA CAAGCTCGAT CATTATCCTT CTGTGAGTTA CCATCTGCCA    60
AGTTCATCCG ACACCTCTT CAATTCTCCC AAGTCGCTCT TTCTGGGAAA AGTTATAGAA    120
ACAGGGAAAA TTGACCAAGA GATTACAAA TACAACACCC CAGGATTCAC TGGTTGCCTC    180
TCCAGAGTCC AGTTCAACCA GATCGCCCTT CTCAAGGCCG CCTTGAGGCA GACAAACGCC    240
TCGGCTCACG TCCACATCCA GGGCGAGCTG GTGGAGTCCA ACTGCGGGGC CTCGCCGCTG    300
ACCTCTCTCC CCATGTCGTC CGCCACCGAC CCCTGGCACC TGGATCACCT GGATTAGCC    360
AGTGCGGATT TTCCATATAA TCCAGGACAA GGCCAAGCTA TAAGAAATGG AGTCAACAGA    420
AACTCGGCTA TCATTGGAGG CGTCATTGCT GTGGTGATTT TCACCATCCT GTGCCCCCTG    480
GTCTTCCTGA TCCGGTACAT GTTCCGCCAC AAGGGCACCT ACCATACCAA CGTTCTCGAG    540

```

(2) INFORMATION FOR SEQ ID NO:372:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 527 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:372:

```

TCGACCCCTG GCTAATGACA AACTATGTGA CCTTCATGGT GGGGGAGATT CTGCTCCTCA    60
TCCTGACCAT CTGCTCCCTG GCTGCCATCT TTCCCGGGGC CTTTCCTAAG AAGCTTGTGG    120
CCTTCTCAAC TTGGATTGAC CGGACCCGCT GGGCCAGGAA CACCTGGGCC ATGCTCGCCA    180
TCTTCATCCT GGTGATGGCA AATGTCGTGG ACATGCTCAG CTGTCTCCAG TACTACACGG    240
GACCCAGCAA TGCAACGGCA GGGATGGAAA CGGAGGGCAG CTGCCTGGAG AACCCCAAGT    300
ATTACAATA TGTGGCCGTG CTGTCCCTCA TCGCCACCAT CATGCTGGTG CAGGTCAGCC    360
ACATGGTGAA GCTCAGCTC ATGCTGCTCG TCGCAGGCGC CGTGGCCACC ATCAACCTCT    420
ATGCCTGGCG TCCCGTCTTT GATGAATACG ACCACAAGCG TTTTCGGGAG CACGACTTAC    480
CTATGGTGGC CTTAGAGCAG ATGCAAGGAT TCAACCCAGG GCTCGAG    527

```

(2) INFORMATION FOR SEQ ID NO:373:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:373:

```

GGCAAGAAAG GATGTCCGCA CAGCTGGCTG CTGCTGAGAG CAGACAAAAG AAGCTGGAAG    60
TGGAGAAGCT TCAGCTACAA GCCCTTGAGC AAGAGCACAA GAAGCTGGCT GCCCGCCTTG    120
AGGAAGAGCG TGGCAAGAAC AAGCAGGTGG TCCTGATGCT GGTCAAAGAG TGCAAGCAGC    180
TCTCAGGCAA AGTCATAGAG GAGGCCCAGA AGCTCGAAGA CGTAATGGCC AAAGTGAAG    240
AGGAAAAGAA AAAGACGAAT GAATTAGAAG AGGAACTCTC CGCTGAGAAA CGAAGAAGCA    300
CAGAAATGGA AGCTCAGATG GAAAAACAAC TCTCTGAGTT TGACACTGAG CGGGAACAGC    360
TTCGTGCCAA GCTGAACCGG GAAGAAGCAC ACACCACAAA CCTCGAG    407

```

(2) INFORMATION FOR SEQ ID NO:374:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:374:

```

GAATTCGGCC TTCATGGCCT ACTCTGTTTT CTCCTGGAC TTATGTGCTT CGTCTGGAAT      60
GTTACATCTC TTCCTCTCTT TCTTTTTTTT TGGTCCCAT GTTGACTGTT TTATTGGGGT      120
TTCTGGATAT CTCGGGGCCA CCTCACAGGA AGCGGTTTGC AATGAGATCA TAAACATTGC      180
CGAAAAATCT GTTCATTACT GCAGCACTGT TTCTCATCCC CTTGACTTTC ATCACAAGGT      240
ATCCCCTTCT GACAATAAAT CATCTTTAAT CATTTCTCAG CAACCTCAAG CCCAGCAGCG      300
AAGAGTCACC CCCTATCTCG AG                                     322

```

(2) INFORMATION FOR SEQ ID NO:375:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:375:

```

GAATTCGGCC AAAGAGGCCT ACCTAAACCG TCGATTGAAT TCTAGACCTG CCCCCAAACC      60
AACAAGGAGA ACAAGCTCAG TCTTCTGTGT CTTAATTTTT GGCTTTACTC TTAGCCCTGC      120
CCCATTTCCT AGGCTCTCCA CAGTCCAGCC GCTTTGAGCT ACTTTTCCTT CCCTGATATG      180
TGCAGCTCTC TCACCTCTGA GCCTCCGCAC CTGCTGTTCC ACAGCACTCT CCGCATTGCC      240
TTCTCCCACT GTGGCTCACT GCTGAGCTGT GTTCAGGCCC TTTGGGAAAC CCTCTCTTTC      300
ACTCCTTTTC CCTGGTCTGG CTTGGGAGCC CATGCTTACC CCTGTCAGGA CACCTTGAAA      360
CCCAGCAGTG AAAACATGAC ACTTCCTTGT CTGGCTGATT TTCTTAGTGA AGCGAGTAGG      420
AGTTTCCTTT GTCAGGACTT CAGCAAGCAA AATTCAGGAG AGGTCATAAA ATGTCTCGAG      480

```

(2) INFORMATION FOR SEQ ID NO:376:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:376:

```

GAATTCTAGA CCTGCCTCGA GTAACCAGAG AGTCTTGTC AATTAAACAC TAGCAGTATT      60
TCCAACACTT TATTTTTTTA ACTTCCTTTA TTATACAGAA GCAGGATCTA TGTTTTTTAC      120
TCTTTTTCG TATTTGATGT GTCTTTATGG AAATCATAAA ACTTCAGCCT TCCTTGGATT      180
TTGTGGCTTC ATGTTTCGGC AAACAAATAT CATCTGGGCT GTCTTCTGTG CAGGAAATGT      240
CATTGCACAA AAGTTAACGG AGGCTTGGGA AACTGAGCTC GAG                                     283

```

(2) INFORMATION FOR SEQ ID NO:377:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:377:

GAATTCGGCC	TTCATGGCCT	AAACAGCAAA	GAACAACTCA	TCACCGCTCA	CGTTCAGTAT	60
CTCCTCATCG	CGGCAATGAT	CAGGGAAAGC	CGCGTTCACG	TTTACCAAAT	GTGCCATTAC	120
AGAGGAGTTT	AGATGAAATT	CATCCAACAA	GAAGGTCACG	TTCTCCAACC	AGACACCATG	180
ATGCCTCCCG	AAGTCCAGTT	GATCATAGAA	CCAGAGATGT	GGATAGTCAG	TATTTATCAG	240
AACAAGACAG	TGAGCTTCTT	ATGCTGCCCA	GAGCAAAACG	AGGACGAAGT	GCAGAATGCC	300
TACATACTAC	CAGAATGTCT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:378:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:378:

GAATTCGGCC	TTCATGGCCT	ACTGAAATTT	CAATAAAACC	AGCTTGAAAG	TTCCATTACT	60
AGAAAGATAA	GAGTGGTCAG	AAAACATTTT	TTATTAACCT	ATTTCATCTA	GTAAGAGTAT	120
CTTAAATGTT	TTTTCTCTTG	AGTACTGAAT	ACACATGCAG	GACAATGGAC	CTAAATACAG	180
TTAACTTTTG	TTTTTCACTC	CTTTGCTTTT	GCATTGTCAA	TAGTCCGGTA	AGGTTTAGGT	240
TCTATCAGAA	GTAATCAGAC	ATGCAGTGGG	CAATCGATAA	TTTCTACCTG	GGCCCTGGAT	300
GCTTGGACAA	CTGCAGGGGC	CATGGAGATT	GCTTAAGGGA	ACAGTACTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:379:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:379:

GAATTCGGCC	TTCATGGCCT	AGTCTGTGTG	TAGTGGAAAC	TCTATTGCCT	GCCCTGCACA	60
TCTGCTCCTT	TTCTTCTCTG	CACTCTGGGA	CAGCTTCTAA	AGTTTGTCCA	ACATGTCATT	120
GACTGAGTTT	TGTATCATTT	CAGTTCTGCT	CTTTACTGGT	TCCTATGTGG	ATGCTAATTA	180
TGCAAATGCA	TTTTCCACCT	CTTGCACTCC	TTTTTCTAAG	TCACCTCACT	TCTCATTTCC	240
TCATGTTTTT	CCNTTATCCT	CTTCTCTCGA	G			271

(2) INFORMATION FOR SEQ ID NO:380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:380:


```

GAATTCGGCC TTCATGGCCT AACGCGGCCA GCGGATTCCG TGAAGCGATT CCTGCAGGCG      60
TTGGTTCCCC TCTTTGACCT GGTACAAGA ATTTTACGTG AAAGATTTTG TCGTCAGAGT      120
CCACATAGTA ACCTATTTGG AGTGCAAGTA CAATACAAAC ACTTAAGTGA GCTGCTGAAA      180
AGAACTGCTC TCCATGGAGA GAGTAACTCT GTCCTTATTA TCGGACCCCG AGGATCAGGA      240
AAACTATGT TAATAAATCA TGCTTTGAAA GAACTCATGG AAATAGAAGA AGTGAGTGAA      300
AATGTATTAC AAGTTCACCT AAATGGACTG CTGCAGATCA ATGACAAAAT CGCCCTAAAG      360
GAAGTCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:381:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:381:

```

GCAGAGTTAA GCAAATTAAT TATAGCTATC TTTAAGCTAT AAATGTGTTA ACATGTATAT      60
ATACCATTTA TTATGTTCTA CTTTAGTGAT ATACCTTAAT TTAGTGGGCT TTGGCAGGGC      120
GGGGGAGGGG GAACGTTTCT TAATCTCTGA GGAAAACAAA ACCTGTTTTC TACTTGAGTC      180
TAACATATGG TCCCAATTTA TTAATACTTC TGTAAATTTT GATGTCAGGT CAACATTTT      240
CAGAAATGTA TTTATTCTCA GAAACAGAAC ACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:382:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:382:

```

GAATTCGGCC TTCATGGCCT AGTTGTTACT GGAGTTAAAG AGAGAAGTGA GAAAGACAAA      60
GGAGTAGAAC GTTTACTCAA ATAAGTAATA ACAGAAAACCT TTCCAAACCA GAATATACAG      120
GTACAGGAAG GTCAAGGGTC ACCAATCCGA GTTAACTCAG ACAAGAATAC TCCAATTAC      180
AAACTCATAA GGGTCAAAGA CAAAGAGAGA ATTTAGAAAA CAGCAGGAGA ATAGAAGCAA      240
ATAACATATA AGATAGATCC AATATGCTTG GTAGCAGATT TCTCAGCAGG

```

(2) INFORMATION FOR SEQ ID NO:383:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:383:

```

GAGAGTGTGG AGAGGGTACA TTTCCCTTGT ATNCTATGTT CTCTTTCTA GTGGGTCTCA      60
TGTAAGATA GAGATATTTT TTGTTTTAG AGATTCCAAA GTATATATTT TTAGTGTAAG      120
AAATGTACCC TCTCCACACT CCATGATGTA AATAGAACCA GGAATAAATG TGTCTNTGTG      180

```

ATAATCCCAT AGCAATTAT GGTAAGAACA AGACCCCTTT CCCTCACCAC CGAGTCTCGA 240
G 241

(2) INFORMATION FOR SEQ ID NO:384:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 299 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:384:

GAATTCGGCC TTCATGGCCT AGAAACACAA TAAAGCCCCA CAACAGCAAA CTTTTTAAAC 60
 GACGAAAGAG AGCTCTAAAT AACAGCAAAA TGCTGCTCTT CTTGCTCCCA TTATGTTTAC 120
 TATTACTGTG CTCTAGTGAG AATAGCAAGG GGTCAAAGGA ATTTATAACA CTTCTATAC 180
 CTTCAACTTA CCAAGTCCCC TACCAAGTAA CAGTTTTCTG TCAGAGAGAA AGTTCTGCCC 240
 TCCCTGCTCA AAGGTGTCCA TGCCAACTAG ACTTCCCCTG TAGCTACCTG GGTCTCGAG 299

(2) INFORMATION FOR SEQ ID NO:385:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 546 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:385:

GAATTCGGCC TTCATGGCCT AGAAAGAGGT GGCAGAAGGA ATGGTAGGAA GGGGAGGATG 60
 TAAGCGATAT CATCAAGTCA GAATCATGAG TTCTTGGTGC CCGGATGTTA GAGGAGGGAA 120
 AAGGTGAAGA TGGCTGAAGC TGTACACTTT CATGATGGTG GAATGGAGGG GTCCCTTGGG 180
 AATTAGGGGT GTCTCTAGGA AGAACCAGCT TAGGGTACAT TGAGAAAGAG GAGACAGGCT 240
 AGGCAGGTCT AGAATTCAT CGCAGATCAC AGCTACAAGG ACCAGGCCTT TGATACTCTG 300
 AGCCTCGATA GCTCTGATAG CATGGAGACC AGCATCTCTG CTTGCTCACC AGACAACATC 360
 TCTAGTGCCA GCACTTCAA TATTGCTAGA ATAGAAGAAA TGGAGAGACT TTTGAAGCAG 420
 GCTCATGCAG AAAAGACGCG GCTGCTCGAA TCCAGGGAAC GGGAAATGGA AGCCAAAAAA 480
 CGAGCCCTGG AAGAAGAAAA ACGACGCCGG GAAATCTGG AAAAACGATT ACAGGGATAG 540
 CTCGAG 546

(2) INFORMATION FOR SEQ ID NO:386:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 317 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:386:

GTTAGGATCA TACATCATAG GTGTATGTTT AACTGTTCAA GAAACTGCCA AACTGTTTCC 60
 CAAAGTGGTT GTATTGTTT ACATTCCAC GAGCAGTGTT TGAGAGCTCC AGTTCTTGCA 120
 CATCCTAGCC ACAAAAAGT TCTGTTTTT AAAGACAATT TTTTTTCT TTGAGAGTTT 180

CGCCCTAGTC GCCCAGGCTG GAGTGCAGTG GTAAGCGAAT CCCTGCTACA GGCCAGAGAC	240
TGTTCTCAGT TGGTTTTTAC ACCAAGTATC GCACTTCATT CTAACACTCC ACCATTTTAC	300
AAATGAGATT TCTCGAG	317

(2) INFORMATION FOR SEQ ID NO:387:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:387:

GAATTCGGCC TTCATGGCCT AGGTCAGGTT AGTCAGCTAA TCGATAAGAG ACTTGAAATT	60
ACTCTTTTGG GATTAGCAAA TAGAAGGGAA AAACATGATA AGGGCACAGA GCGGTGGGTC	120
TGGGGGAAAA AGCAGAGGCA CAGTTTGAAG AAAATGTGTA AGAGACTGAC TAGGTAAGAT	180
ATGGTCACAG TTCATAAGTC CTTGAATTC TAGGATTAAA AAGGTGAACG CGAG	234

(2) INFORMATION FOR SEQ ID NO:388:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:388:

GAATTCGGCC TTCATGGCCT ACTAGATAAG TGTCAATTCC ATCTGCTTCT GATTTCACAC	60
GTCACTGCCC TGGTCCACAC ACTGTGATCT TCTGCCCCCA TCTGAGTGCC GCATACTCAG	120
CCTTGTCCTT GCATCAGACC CCGGCCACGC ACAGTAACGA GAATGGGCTT CCTAAACACA	180
AATCTGATTT GTTCGCGCTT CCACTTCCTA GTGGCTTCAT TCTCGTGCCC TCACTCAGGG	240
CCCTCACACA TGCTGTTCCC TGCACCTCCG ACACCCTTCC CAGCGCCCCCT CGAG	294

(2) INFORMATION FOR SEQ ID NO:389:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:389:

GAATTCGGCC TTCATGGCCT AAGCAAAGCT AAGTGTAATA CTAAAAAGCA GTTTGTTGCA	60
ACTGGTCATA AAAGTGATTA AATCTAAAGC TGGCATTAAT AAGGAAGCAA GGTAAATAAA	120
CAAAAATATA AACAGCTTTG AGAAAGTACA CCTAATAACA AAATCTTGTA ACACAACAAA	180
TGAAATCAC AAAAAATATA AGGAGACTCC TCGAG	215

(2) INFORMATION FOR SEQ ID NO:390:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 477 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:390:

```
GAATTCGGCC TTCATGGCCT AGAAAAACAC TATAGTCACG CAAGTAATGA CCCTTCTTAT      60
CCTCAACCCC CAGCATATAT GCACAAGGAC AAACAGTATA CATACAATCT CACCTGAGAG      120
ACGTCCTCAG ACTTGTGTTG AAACCTTATC ATGCTGCATT ATCTCCCTTA CAACATCCTT      180
CCTGCCTTGT TTCTCATTTT CACACTATAC GGAGTAAAAA AATATACAAT TTCTATATAT      240
TATATATATA ACCTCCATAT ATTTTATACT ATTTCATATT TTATACTAT CAGATTAATG      300
TTTATATATT TATCTATCAT TTAAATATG CTATGTAAAG CATCTACAAA ATTGGTCACC      360
ATTCTATGGA GAAGTATCTG CAGAACTCTA GAAATGAATT CATCTTTTGC TTACCCCTCC      420
CTTTTGGAGG GGACAGGGAC TTTCTTCTTT TCCCTCATCT TCATCTTCCC CCTCGAG      477
```

(2) INFORMATION FOR SEQ ID NO:391:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 247 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:391:

```
GAATTCGGCC TTCATGGCCT AGTTAGTCAG AGTGAAATAT TCAATAATGA GTGGTGCAGC      60
CTTGGGACTT GAGATTGTTT TTGTCTTTT TCTGGCATT TTTCTGCTTC ATCGATATGG      120
AGACTTTAAG AAACAGCATA GACTTGTGAT TATTGGAACA CTGCTTGCTT GGTATCTCTG      180
CTTCTTATT GTCTCATAAC TGCCTCTGGA TGTTAGTACG ACAATATACA ACCGGTGCAA      240
GCTCGAG      247
```

(2) INFORMATION FOR SEQ ID NO:392:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 366 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:392:

```
GAATTCGGCC AAAGAGGCCT AGTCATCTGC ATTTATTATG AGCAGCAGGT GGGACACTTC      60
CAGCAACAGT AAAAAAAGT AATTTACAAA AGCAGGTTTC AGTGAAGCCA TCTGGTTGTT      120
ACCCTTGGGT GCTCACACGT AGATGCCAAC CCAGAGCAGC AGGAAGAGGA CTCCAAAGCC      180
CATGAAGAGT GAGGCCACTA AGGAGATGAG GAGCTCTTTA TAGATATCAC GAGTGTAATT      240
GGTAGAGGTG ACCTCGTAAA CGAAGAACCA GGCGGTGAAG AACATGCCAA TGGCCAAAAG      300
CACCACGGTC AGATGGGGGA AGACAGCTGG GTTCACTGGG CTGGTATATC TGCTCATGGC      360
CTCGAG      366
```

(2) INFORMATION FOR SEQ ID NO:393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:393:

```
GAATTCGGCC AAAGAGGCCT ACCCTGGGTT AACATTCAAG ATGGTACATG CTGAAGCCTT      60
TTCTCGTCCT TTGAGTCGGA ATGAAGTTGT TGGTTTAATT TTCCGTTTGA CAATATTTGG      120
TGCAGTGACA TACTTTACTA TCAAATGGAT GGTAGATGCA ATTGATCCAA CCAGAAAGCA      180
AAAAGTAGAA GCTCAAAAC TCGAG                                         205
```

(2) INFORMATION FOR SEQ ID NO:394:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:394:

```
GAATTCTAGA CCTGCCTCGA GCCGGAGATG GANAAGAAAG TCAGCCTACT CAAGGACAAT      60
AGCTCTCTGG AATTGACTC TGAGATGGTG GAGATGGCTC AGAAGTTGGG AGCTGCTCTC      120
CAGGTTGGGG AGGCACTGGT CTGGACCAA CCAGTTAAAG ATCCCAAATC AAAGCACCAG      180
ACCACTTCAA CCAGCAAACC TGCCAGTTTC CAGCAGCCTC TGGGCTCTAA TCAAGCTCTA      240
GGACAGGCAA TGTCTTCAGC AGCTGCATAC AGGACGCTCC CCTCAGGTGC TGGAGGAACA      300
TCCCAGTTCA CAAAGCCCC ATCTCTTCCT CTGGAGCCAG AGCCTGCGGT GGAATCAAGT      360
CCAAGTAAA CATCAGAACT TCTCGAG                                         387
```

(2) INFORMATION FOR SEQ ID NO:395:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:395:

```
GAATTCGGCC AAAGAGGCCT ATCGAGAAGC CTTGTTTATT TAATGTGAGT TTGTGCCTTT      60
TTGTCTCAAT CTTCCAATAC AGGTATATTG AGAAAAAAG CAGTCTAATA AAATCCTAGA      120
CAGAACTTTC TGGAGTCCAG TTTGGTGATG TCCATTTTCC AGCTGTATGT ATCCTCAAAC      180
TTGCACTGAT AACCGCCATT TTACCAGGGC AGGATTAGGA AGAGGTACAA AGGTGTGTCT      240
GAAAATTTTT GCACGTGGAT TTCTGCATAT AATAGTCCCG TGTCAGTTTA CTTATGCAAA      300
CATTGCACAT CTGAATTGTA ATTCGGCCGT TTCCTACTGA CAGGATGTCC TTTTGCTTTT      360
GTCTGCCTCC TCTTCACATC TTCCTCTTTA TCCACCCTGC AGCCGGGGGG CGGGGGAGAC      420
CGGATCCCGAG GCAGGACAGT GGCTAGGCTG CGTGTCCCCA CCCCCGACCC TCGTTTGACC      480
CCTGGGAGCC GGGGCGAAGA CAGCACAAGG ACGGAGCCCT CGGATCCCTC ACGAGTGGGG      540
CAGAGGCTGC GGG                                         553
```

(2) INFORMATION FOR SEQ ID NO:396:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:396:

```

GAATTCGGCC AAAGAGGCCT ACAAGGTTAC TTGACCAAGA TGGTGACATT GTAAGATTGG      60
AACAAAGGAA ATGTGACTTC AGAGTCATGG TTGTAACTA TGCTATGAAG TAGGAAAAC      120
TTATGAGGTC TTTTAACTC AAACAGTCGA GTTTAAAGT GAGGGTTAGC AATGATGAAT      180
GAGTGGCCAA AAAATGTATT CATATTTTTA GTCTTCTTA GAATTACTGG TAGTTGTGCA      240
CAACTAGAGG GTATTTATTT GTGTGTGTAT GTGTCGTGTG TGTACGAGTG CTGGAATAC      300
TCTGCCAGTT TACAGTAGAG GCAGGCTTAC ATAATTCAGT CATGAAAGCT GAGGCTTATA      360
GTTTAGAGGG GATCGTCCTC TTCTTAATGA GTCTGTAAGT TACAAAAATA ACTTTTCTCT      420
TTATTTACTA ACTGGTTGGT TTTTAATATT AAAATATTAG GTGCTTCTCG AG      472

```

(2) INFORMATION FOR SEQ ID NO:397:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:397:

```

GAATTCGGCC AAAGAGGCCT AGATTGGGGG ACATTCTTCT TTAGAAGGAA AAGAGTCTAA      60
TTAGTGGATA TTAAGTAATT AAATAATACA TACTATCAAA TATTATGAGA GTCACATGAA      120
CCATGAAGTC TTCACTTAAT TTAGGAGAAA TGGGGAATAT TTTCTATCAT TCCTGATAAC      180
AGAACTAGAT ATTTCAAGAT CATAGTCATG GAATGTAATC CATAATACCA AACAGGGTGC      240
TTTACTTTGA AGCCATTGAC CATTAAATTT GATTGTTAGT AGCACAGGCT ACCAAAAAAT      300
AGCAAGGAAT ATGGTATCCA CACAGATCTC GGCTGGCCTC AAGTAATCAA AAGTGAGAAT      360
GAAACATACA TGACACAAC TGGGACCTCT GGGTTTCTGA GACGTGGGCT ACAAGATTAT      420
ATTAGGTAGA AAACATAAGG AAATGTATT CCAAGCAAAAG TGGCAAGGGA ATTTCACAGA      480
ACTAATTTTT TAAGGGAGGT AATAAAGCA GCAGTTAAAA TGCATGTCCA TGTATCAGAT      540
TCCTGGAG      548

```

(2) INFORMATION FOR SEQ ID NO:398:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:398:

```

GAATTCGGCC AAAGAGGCCT AGGCTAAATA CCGGCACGAG ACCGATTTC TGAAGACAGC      60
AGATTTATCA CTGTTAATCC AGCGGAAAAA AACACCTCTG GAATGATAAG CCGCCCTGCT      120
CCAGGGAGGA TGGAGTGGAT CATCCCTCTG ATTGTGGTAT CAGCCTTGAC CTTCTGTGTC      180
CTCATCCACT TCTCAAAC TC GGAGAACTGC AAGGAGCTGC AGCTGGAGAA GCACAAGGGC      240
GAGATCCTGG GCGTGGTGGT GGTGGAGTCG GGCTGGGGCT CCATCCTGCC CACGGTGATC      300

```

CTGGCCAACA	TGATGAATGG	CGGCCCGGCT	GCCCCTCGG	GGAAGCTGAG	CATCGGGGAC	360
CAGATCATGT	CCATCAATGG	CACCAGCCTG	GTGGGGCTGC	CCCTCGCCAC	CTGCCAAGGC	420
ATCATCAAGG	GCCTGAAGAA	CCAGACACAG	GTAAAGCTCG	AG		462

(2) INFORMATION FOR SEQ ID NO:399:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:399:

GAATTCGGCC	AAAGAGGCCT	AGGCCGGGCA	CACAGAAAAA	TGCGAGGAAT	AGAAATGCTT	60
GCATACTCTT	GATTTTTTTT	TTTTTTTTTG	GTGTAAAAAA	CACACCCTCC	CCTCCCACCC	120
CAAAAAACAT	CAAATTCCTT	CCTTTTCCCC	AAATCCCTGG	ATCTTGGAAT	GAAAGCCACC	180
CTTCCCAAT	CTGTCCTCAC	CTCCTTCAGC	CCATCCAAGT	TATGCACAAA	AAAACAAAAA	240
TTAGTGAGAA	ATTTGGGGAT	TTGCACAACA	AAAAATTAGA	TAATGTTTTT	CAAACTAGG	300
TCTTCTATGC	TGTGTCAAAA	AAAGTTTCCT	ACAGACTGAG	GATATTCACA	CGACAGGAGC	360
CTGGGGGTTA	AATGAGCCTT	TATTAGAATG	TTGTAGCAGT	TGTGTTTGA	GGCGGTGGCC	420
CTACAAAA						428

(2) INFORMATION FOR SEQ ID NO:400:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:400:

GAATTCGGCC	TTCATGGCCT	AAGTTGAAAC	TTACGAGTAA	CATACCTGGT	GTCTGATTGG	60
TTGTCATACT	TTTCATTTTC	CCTCCTTTCA	GATCCAATCC	ATTCTACACA	TTATACTGAT	120
TTTTTCCTAG	TGTACTGATT	TCTGTTATGT	CACTTTGCTG	CTTAGGCTTC	TTAATGCTTA	180
CTGTATCAGG	TGTAAACACC	TTTGCTTAC	CTTTCCAGGC	CTTTTTAGAG	TCTTATATAG	240
CTTACTCCCA	TGCTCCAAC	CCCCTCGAG				269

(2) INFORMATION FOR SEQ ID NO:401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 236 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:401:

GAATTCGGCC	TTCATGGCCT	AGGCACTTTG	AAGAGATATA	GAACCTCCGTG	TATCACATTT	60
TCCATTTTTA	TTTCAATTTT	TAATTGCCCA	GAGCCTAATT	TCTGTGGGCC	TCTGCTGATT	120
TGCACATTTG	AGATTCGTGT	GTAAATATGC	GTGTGGCATG	TGTACACGCC	TGGGCCTCCT	180
TATCACAAAG	TGTGCTCTCT	CAGTGTTTAA	ATACACACAA	TCCACATCGA	CTCGAG	236

(2) INFORMATION FOR SEQ ID NO:402:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:402:

```

GAATTACCTT ATACACATAG CCTGAAGGTA ATTTTATACA ATATTTCCAA TAGTTTTGTG      60
CTTCAAACAA AGTTTGGGTA CATTGAACCA TCAGAAAGGA AAGGTGTCAT TGTCTCAGCC      120
ACCCATGTGG ACAATCTCTG GTTGTTTGGC ATCACTGTTG TTGCTGAGTC TGAATGTGAG      180
GAACATGCCA TTGGCATGTC TTGCCACAC ACACACCATT TTGTTATCTT TTGTGGGTGT      240
GCTTATGTGG GGGAATCTGG GCGTGTGTGA AAAAAATATA TTGCAGCTCG AG              292

```

(2) INFORMATION FOR SEQ ID NO:403:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:403:

```

GAATTCGGCC TTCATGGCCT ACTTGGGGTA CTGAGATACA TGGGGCCGAA AAGGGGTAAT      60
ATGGCCATCT TTTATCAGAA AAAGTGACAA AACGGGAATT TAAAAAATGA ATTTCCATC      120
TGACTTTATT TCCAAATACA CTTTCTTTT TAAAAAACCA ATACACTTTC TTTGAGGATG      180
ACAGTATTAG GAAATCCAAT TATACAAAAA ATACTACATC TAGTCTGGGG TAGATATATT      240
TATTTTGGT AACATACATT AAGTGGCACT AATTACACAG TAACTATAAG GTAACATAA      300
TGAAACCACA GAACTGTAAC TCTGCCACAG CTGCATGAAC TCGAG                      345

```

(2) INFORMATION FOR SEQ ID NO:404:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:404:

```

GAATTCGGCC TTCATGGCCT AAAAAAAAAA AAGCCATTAA TCTAATTAAT TGTTTAATCC      60
TGCTTACAAG ATTATCTTGA AAAAATGTGC TGGGGAGTAT GGTATAATGA ATTACGGGTC      120
CAAGAATTTG GGTTCAGATA CCACCTTCAG TCTTTACTAA GCTGCGTGAC TTAGCAAAG      180
TGCTTAGTCT CTCTAAGCTT CGGTTTCCTA ATCTATGAGG AGGGCCTAAG ATATCACCAC      240
CCATCACTCG AG                      252

```

(2) INFORMATION FOR SEQ ID NO:405:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:405:

```
GAATTCGGCC TTCATGGCCT AAGAATACGA AATTGAGAG GATGAATTG ACCTTTAATA      60
TTGTTGGACT TTGTATTGGA TATCTTTCCT CCATCACTTC AAAATCGTCT TGCTTGGCCT      120
CTTATTGCAA CCACAGCTGC AGTAGACAGT TCCATACAAG CTTCCAAGAA CTTTCATGGGT      180
ACATCTGGAG AGCACCTCAC CTGGGGCCAC ATTCTCTACC TTTCTGTCT TACTCTTCCT      240
CCTCTGGGCT TCTTCTGGT GCATGGGGGT GGGGGGAGAT ATTAAGTATT CCCCAACAGC      300
TCGAG                                     305
```

(2) INFORMATION FOR SEQ ID NO:406:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:406:

```
GAATTCGGCC TTCATGGCCT ACACAGCAAC AACCAACATA GCTAATACAG AAAGCAGTCA      60
GCAGACTCTA CAGAATTCCT AGTTTCTTTT AACCAAGGTG AATGATCCTA AAATGTCTGA      120
AACGGAGCGC CAGTCCATGG AAAGCGAGCG TGCAGACCGC AGCCTGTTTG TCCAAGAGCT      180
CCTTCTGTCC ACTTTAGTGC GTGAAGAGAG CTCATCCTCA GATGAGGATG ATCGGGGGGA      240
GGTTCTCGAG                                     250
```

(2) INFORMATION FOR SEQ ID NO:407:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:407:

```
GAATTCGGCC TTCATGGCCT AAAAGAACT AGGTGTGATT GGAAGGAAGA ATCATGAAAG      60
ATCAGGGTAG ATACTGGTGG GGCAGCTATT AAAGGAGTTT GAGCAGGGGC ATGACATCTT      120
CACATTGAAA GCAATATGGG AGTCGAATTA AATTAGTAC CCAGTTGAGA TAAAAGTCCA      180
TTGCCATATT CACAGTGAGG TGGGACAAAA GCAGAGTCAG AGAGATTAAG AGGCTGGGAA      240
AGATTGAAGT GATTTTtagg AATCAGAATC CACATCAGTT GATGACAAGT ACAGAAGGGC      300
ACAATAGCAA GAAGAAGAAG TAAATGATAA TTCCTAGATG CCATTAGTCA CAATCAAGTA      360
CGGAAGAGAC ATTATTGACT GAGGTTGAAT CAGGGCAGAG AAGATAATAT ACCTGATTTT      420
GGAAGTGTG CATGTAAGGG GGCTTCGATT TCAGCTACTT ACATACTTGG GAAGTCTCGA      480
G                                     481
```

(2) INFORMATION FOR SEQ ID NO:408:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:408:

GAATTCGGCT TCATGGCCTA CCCGGCAATT GGCTGATCCG CAGAAACATT TCTGGGCTTC	60
TTTTCCATAT CTCTGGAAGT GATAGTCAAA CGTTAACTCT GAGCCTGAAG GAACCAGTTT	120
GGTGGTAAAA AACCCAACCC TCAGTTGTCC GTTCACAGTC CATTTTTGGG TTTCACAATT	180
TGGTTCACAG CTGTGATTCA TGAAACGAGA GCAATTTCCCT TTTTGAGTGG CATCTATTAT	240
CTCATCATTC TTCAGGGCCA TGAAATAGTA ATGGATGTTT TTGTTTCGTG CATACTCCTT	300
CACTCGAG	308

(2) INFORMATION FOR SEQ ID NO:409:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 337 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:409:

GAATTCGGCC TTCATGGCCT ACAATGAGGA TAATACAAA GAGCAATCTG CCCCACTGTG	60
AGCCTGAGCT TCCCATACCT ACTTCTCTCT CTCCAGAGGG ATCCACTCCT ACCAGTCTGG	120
AAAGCACTGG GCATACAAGC GCACAAATGC GTGGCACATA CTACAAATCC TTCTAAAGCC	180
ACTGCTGTAC ACCTGCCTCA CTTAACCATG CAGCCTCAAG GCTGTCTCAT GTCATTCTTT	240
CCTACAGCTG CAGAGTTTTC AACATATGGA CAGGTGTGCC AGGATTATAT TGACTAGTCT	300
CTTACTGATC TAGTCACTT CCTAAATACA ACTCGAG	337

(2) INFORMATION FOR SEQ ID NO:410:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 315 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:410:

GAATTCGGCC TTCATGGCCT AAAATGTGGG GATTGGGAAC CACTAGTTCT TTCAGATGGT	60
ATTCTTCAGA CTATAGAAGG AGCTTCCAGT TGAATTCACC AGTGGACAAA ATGAGGAAAA	120
CAGGTGAACA AGCTTTTCT GTATTTACAT ACAAAGTCAG ATCAGTTATG GGACAATAGT	180
ATTGAATAGA TTTCAGCTTT ATGCTGGAGT AACTGGCATG TGAGCAAACT GTGTTGGCGT	240
GGGGGTGGAG GGGTGAGGTG GCGCTAAGC CTTTTTAA GATTTTTCAG GTACCCCTCA	300
CTAAAGGCAC TCGAG	315

(2) INFORMATION FOR SEQ ID NO:411:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 277 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:411:

```

GAATTCGGCC TTCATGGCCT ACCTGAACCC CTTACTTCGA AGGATCATAA GATTACAGG      60
GGTGTTTGCA TTTGGACTTT TTGCTACTGA CATTTTGTGA AACGCCGGAC AAGTGGTCAC      120
TGGGCACTTA ACGCCATACT TCCTGACTGT GTGCAAGCCA AACTACACCA GTGCAGACTG      180
CCAAGCGCAC CACCAGTTTA TAAACAATGG GAACATTGT ACTGGGGACC TGGGAAGTGAT      240
AGAAAAGGCT CGGAGATCCT TTCCCTCCAA ACTCGAG                                277

```

(2) INFORMATION FOR SEQ ID NO:412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:412:

```

GAATTCGGCC TCATGGCCTA GTGGTAGGGC TGAATTCGCA CTATAGGGTT AGATTTTCTA      60
CTGTAGGGTT AGATTTTTTT AATGGTGTGT ATATAATAAT ATAATATTAA TAATAATCGG      120
AGAGGGTCAA AGAGGAGGGA AACTGGGTAA CCCAAAAACA TAAGGTCGAG GTCCCTGTTC      180
TTCACCGGAA AGAGGGTCAA GGACCAAAGC CATAGATTG ACTGGTAGTT TAGTTTAGTC      240
CTGTCTACGA AGAAGAAGAG CGGTTGTTTG TTTAACAGA TTCAAGAGCA GGAAGCACTC      300
ATTAGATAA CTCGAG                                316

```

(2) INFORMATION FOR SEQ ID NO:413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:413:

```

GAATTCTAGA CCTGCCTCGA GTCAGGCTTT TAAAAACAAT CTCATCTGTC CCTCTAAAAA      60
TTAGCTTCCT TTAGAACCTC TTCTCCTGG CAATATATTA GTGATACTAT TGTATCTTC      120
ACACTAAAGA TTCAAACCTT TAGTTTTGT TTAGGAAAG TTTTATT TTACATTTCT      180
TTCATCCTTC ATAATTACCC AGTCATCATG AACTTTGTAG TTATCTATTT CTTCATAGGA      240
ATCCTCGAG                                249

```

(2) INFORMATION FOR SEQ ID NO:414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:414:

GAATTGATAC TAGGGACCGA AGGGAAGTAA GAGACTCCAG AGACATGCGG GACTCAAGGG	60
AGATGAGAGA TTATAGCAGA GATACCAAAG AGAGCCGTGA TCCAGAGAT TCTCGGTCCA	120
CTCGTGATGC CCATGACTAC AGGGACCGTG AAGGTCGAGA TACTCATCGA AAGGAGGATA	180
CATATCCAGA AGAATCCCGG AGTTATGGCC GAAACCATT T GAGAGAAGAA AGTTCTCGTA	240
CGGAAATAAG GAATGAGTCC AGAAATGAGT CTCGAAGTGA AATTAGAAAT GACCGAATGG	300
GCCGAAGTAG GGGGAGGGTT CCTGAGTTAC CTGAAAAGGG TAGGCTCGAG	350

(2) INFORMATION FOR SEQ ID NO:415:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:415:

GAATTCGGCC TTCATGGCGT TAAACTGTG CCTAACAGAG GTGTCCTCTG ACTTTTCTTC	60
TGCAAGCTCC ATGTTTTTAC ATCTTCCCTT TGAAGTGTG CTGCTGCTGC TGCTGCTACT	120
ACTTACAAGG TCCTCAGAAG TGGAATACAG AGCGGAGGTC GGTCAGAATG CCTATCTGCC	180
CTGCTTCTAC ACCCCAGCCG CCCCAGGGAA CCTCGTGCCC GTCTGCTGGG GCAGAGGAGC	240
CTGTCCTGTG TTTGAATGTG GCAACGTGGT GCTCAGGACT GATGAAAGGG ATGTGAATTA	300
TTGGACATCC AGATACTGGC TAAATGGGGA TTTCCGCAAA GGAGATGTGT CCTGACCAT	360
AGAGAAATGT ACTCTAGCAG ACAGTGGGAT CTACTGCTGC CGGATCCAAA TCCCAGGCAT	420
AATGAATGAT GAAAAATTTA ACCTGAAGTT GGTCAATCAA CCAGCCAAGG TCACCCCTGC	480
ACCGACTCTG CAGAGAGACT TCACTGCAGC CTTTCCAAGG ATGCTCGAG	529

(2) INFORMATION FOR SEQ ID NO:416:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:416:

GAATTCGGCC TTCATGGCCT ACTGAGCCTA GTAATTCAAG GCTGCAGTGA GCTGCGATCA	60
CATCACTGCA TTCCCGCCTG GGCAACAGAA GTAGACTCCA TCTCTAAAAA GAAGGAAAGA	120
AAAAAAGGAA GAAATATACA GTAATTTTAA ACTGGGAGAT GAAATGCTAA TTTCTAGAAG	180
TCCATTGTTG TTTGAAGGGT CTCATGTCAA AAAAAAAAAA AAGTAAGTAA AATAAGACCC	240
ATCCTACTGT TTTATATACT AAAATAGTAA GTTAATTAAA TGAAATGAA GTACATTTGG	300
GCTTTCATTT ACCAATCCTG GAATGTTGAA AAGTTGCCCA AAAGACATTT AGCAAGACTC	360
GAG	363

(2) INFORMATION FOR SEQ ID NO:417:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:417:

GAATTCGGCC TTCATGGCCT ACCTGAAAGC CCATCTCCTC CAACTTGCAG CGCCGGTAGA	60
GCTCCTAGTG CCGGCTGTGG GTCTGCTCGC GGAGGTCTTC CATGTTCAAC CGGATCAACC	120
TGCCTCGAG	129

(2) INFORMATION FOR SEQ ID NO:418:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:418:

GAATTCGGCC TTCATGGCCT AGGAGGTGGG TATAGGGAAC ACTTGGGGAG AAATAGTGAA	60
ATCTGAATAT AGACTGTGCA TTGTATCATT TAGTATAAAT GTTGACTTGC CTGATTTTGT	120
TGTTGAAGGC ACTGTGTTA CACAAGAGAA CGTCTGTCTT CCTAAGTGAT GCATGCCAAG	180
GTTTGCAGGG GCATCCTGTC TGCAATTACT CTCAAATAGA TCAAAATAAT AATAACGTGT	240
GTGTGCATGA TGGAGACAGG GAAGAAGAAA GGAAAGGGCT CGAG	284

(2) INFORMATION FOR SEQ ID NO:419:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:419:

GCCAGCACAT TGTGGAACAG AAAAATGGCA AAGAAAGAGT GCCCATCCTC TGGCATTTC	60
TGCAGAAGGA AGCAGAGCTG AGGCTGGTAA AGTTCCTGCC TGAGATTTTG GCCTTGCAAA	120
GGGATCTAGT GAAGCAGTTC CAGAACGTCC AGCAAGTTGA ATACAGCTCC ATCAGAGGCT	180
TCCTCAGCAA GCACAGCTCA GATGGGTTGA GGCAGCTGCT TCACAACAGG ATCAGAGTCT	240
TTCTGTCCAC ATGGAACAAA CTGAGGAGAT CGCTTGAGAC GAACAGCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:420:

GGAACCAACA GAACAACCTG TGAGGAAGAA CAAATGGCC TCTAATATCT TTGGGACACC	60
TGAAGAAAAT CAAGCTTCTT GGGCCAAGTC AGCAGGTGCC AAGTCTAGTG GTGGCAGGGA	120

```

AGACTTGGAG TCATCTGGAC TGCAGAGAAG GAACTCCTCT GAAGCAAGCT CCGGAGACTT      180
CTTAGATCTG AAGGGAGAAG GTGATATTCA TGAAAATGTG GACACAGACT TGCCAGGCAG      240
CCTGGGGCAG AGTGAAGAGA AGCCCGTGCC TGCTGCGCCT GTGCCCAGCC CGGTGGCGCT      300
CGAG                                                                    304

```

(2) INFORMATION FOR SEQ ID NO:421:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:421:

```

TAATTTAGAT TATACAGAAC TTGGCCTGCA GAAACTGAAG GAGTCTGGAA AGCAGCACGG      60
CTTTGCCTCT TTCTCTGATT ATTATTATAA GTGGTCTCG GCGGATTCTT GTAACATGAG      120
TGGATTGATT ACCATCGTGG TACTCCTTGG GATCGCCTTT GTAGTCTATA AGCTGTTCTT      180
GAGTGACGGG CAGTATTCTC CTCCACCGTA CTCTGAGTAT CCTCCATTTT CCCACCGTTA      240
CCAGAGACAA CTCGAG                                                                    256

```

(2) INFORMATION FOR SEQ ID NO:422:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 216 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:422:

```

GCGATTGAAA TGGATCTCC AGCTCTTCCA CCAAAGCCAC CTAAGCCAAT GACTTCAGCA      60
GTTCCAAATG GAATGAAGGA CAGTTCTGTT TCTCTTCAGG ATGCAGAATG GTACTGGGGG      120
GATATTTCAA GGGAGGAGGT AAATGACAAA TTGCGGGATA TGCCAGATGG GACCTTCTTG      180
GTCCGAGATG CCTCAACAAA AATGCAGAGA CTCGAG                                                                    216

```

(2) INFORMATION FOR SEQ ID NO:423:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 389 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:423:

```

GAATTCGGCC TTCATGGCCT AAAATTAATG AGTTGAACCT GTGACCACTG CATTCAAGAA      60
GAGTCACCCA AGAGAGAGGT GGGGAGTCGA ACAGAGCTCC TTTACTTTCT CCCACAGAGG      120
AAAAGGTGGA ATTCTGGGCT GGCTTTCCCT CACCAGAGGG TATCCCAAAT CTATGACAAA      180
AGAAAAATGC CAGTCTCTTT TGGAAAGTAG GGAATGCCCT AGTGATGCTG TATGAAGAAG      240
CAAGCCTCCA TCTTCCCCGG GGAAATTTGA AACCAAGATG GGGTCTGTG AATGACCCCTC      300
TAGCATTTAT TGAGTGCCCTA TTAGACAGGT GGCCTTGGGC TTGAAATGC AATATCTTAT      360
TTAACTTAAT TCTGAGAACG TATCTCGAG                                                                    389

```

(2) INFORMATION FOR SEQ ID NO:424:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:424:

```

GCCCCGTGCTG ATGTCTTTGA AAGAAGGCTA TAAGAAGTCC TCAAAAATGG TATTTAAGGC      60
TCCCATCAAA GAAAAGAAGA GTGTTGTGGT CAACGGAATA GATTTATTAG AAAATGTCCC      120
ACCCAGGACA GAGAATGAGC TCCTTCGAAT GTTCTTCCGG CAGCAGGATG AGATTGACG      180
GTTGAAAGAG GAGCTGGCCC AGAAGGACAT CCGCATTCCG CAGCTCCAGC TGGAACTGAA      240
AAACTTGCGC AACAGCCCCA AGAACTGTTA GCTCCCCAGC TGGGCTGTTT TCTAAGCCGA      300
TCTCTCCGTC GTTCTACTC ATCCCTTAAC TTCTCCCTTA CCAGTGACCC CAGAGACAGA      360
GCCAGGACAG GAGTGGGGGC CAGCCTGAGG ACCCCCGCCT ACCACCTCGA G      411

```

(2) INFORMATION FOR SEQ ID NO:425:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 691 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:425:

```

GGTACCAACA GGACACCCCG GTGGCCCCC GCTTTGACGT CAATGCCCCG GACCTCTACA      60
TTCCAGCAAT GGCTTTCATC ACCTACGTTT TGGTGGCTGG TCTTGCGCTG GGGACCCAGG      120
ATAGGTTCTC CCCAGACCTC CTGGGGCTGC AAGCGAGCTC AGCCCTGGCC TGGCTGACCC      180
TGGAGGTGCT GGCCATCCTG CTCAGCCTCT ATCTGGTCAC TGTCAACACC GACCTCACCA      240
CCATCGACCT GGTGGCCTTC TTGGGCTACA AATATGTCGG GATGATTGGC GGGGTCCTCA      300
TGGGCCTGCT CTTCGGGAAG ATTGGCTACT ACCTGGTGCT GGGCTGGTGC TGCCTGGCCA      360
TCTTTGTGTT CATGATCCGG ACGCTGCGGC TGAAGATCTT GGCAGACGCA GCAGCTGAGG      420
GGGTCCCGGT GCGTGGGGCC CGGAACCAGC TGCGCATGTA CCTGACCATG GCGGTGGCGG      480
CGGCGCAGCC TATGCTCATG TACTGGCTCA CCTTCCACCT GGTGCGGTGA GCGCGCCCGC      540
TGAACCTCCC GCTGCTGCTG CTGCTGCTGG GGGCCACTGT GGCCGCCGAA CTNATCTCCT      600
GCCTGCAGGC CCAAGGTCC ACCCTGTCTG GCCACAGGCA CCGCCTCCAT CCCATGTCCC      660
GCCAGCCCC GCCCCAACC CAAGGCTCGA G      691

```

(2) INFORMATION FOR SEQ ID NO:426:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:426:

```

GCAGACCATA TATCGAAAGT TCTTACTTG TATCAAGGTG AGAAAAAATT AGAAGAGATA      60
TTACCTCTGG GACCAACAA AGCTCTTTT TATAAAGGAA TGGCATCATA TCTTTTACCA      120

```

GGACAAAAAT CTCCATGGTT TTTCCAAAAA CCCAAAGGTG TAATAACTTT GGACAAACAA	180
GTAATATCCA CGAGTTCAGA CGCCGAATCC AGGGAAGAAG TTCCCATGTG TTCAGATGCT	240
GAATCCAGGC AAGAAGTTCC CATGTGTACA GGCCTGAAT CCAGGCGAGA AGTCCCGTG	300
TATACAGATT CTGAACTCGA G	321

(2) INFORMATION FOR SEQ ID NO:427:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:427:

GAATTCGGCC TTCATGGCCT ATATACTATC AAATGAAAAT AGCAAGATGC TACCATTAT	60
ATTAAAAAGA GGACAAAATA TTAATATATT CATGGTTGCT TGTCTATGTG GAATATTCT	120
GGATATATAC ATAAGAAGTT ACATTGGTTA CCTATGGGCA GGTACTACT GGGTGGCAGG	180
TGGGCTCGAG	190

(2) INFORMATION FOR SEQ ID NO:428:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 670 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:428:

GAATTCGGCC TTCATGGCCT AGGCAAAGCT GGCCCTGACG CCTGGGTTTC TTGCCCCAG	60
CTGCCCCAGCA GGTGCCTCGA TTCCCTGCCC TTGTGACCTC CCAGGAAACA GAACTGATCT	120
GGGACACTAT GTCACCTCTC CTCTCATCTG GGGTCAGTCA GGGTTCGGGG GCTGCAGCAG	180
CCAAGCGCAT GAGAGGTGTT TCCTTGGCCT TCCAGAAGGC CCACTGTGGA GCCAGCCTCC	240
CTATGGGAGG CAGAGCGGCA AGGACAGGGC TTTGGAATCA GCCAGGTCGG CTCCTGGGCT	300
GTGGCCGTGG AGAAACACTG CCCCAGGAT GACACAGGCA AGAGCCCCTG AGGCATGGGA	360
GGCCCAGGGA AGACCATGGG CTGTAGGGGA GAGTGTGGCA GGTGACCCAA AGGCCCAAAG	420
AGGGCCGTGG GGCCTGAGGA GGTCAATC TCTTCTGAGT GGGGGCAGGT CGATTCTTGC	480
ACAAGGTGGG CTCTTCACTG AGCCATAAGG GACAGGGAGG TATGGGAGAG CGCTGGGGGC	540
CCATCCCCCT GTCCACCCAG TGTCCACTGG CCTGTCCTTC AGGGAGCAGA GCAGAGCAGG	600
TGGTGGACGG GCCCAGTGCT GGGTGTTC ACCACCATCC CCCCATCCCC CATCTAAGTC	660
GCTCCTCGAG	670

(2) INFORMATION FOR SEQ ID NO:429:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:429:


```

GTAAGGATTG GCGATTCTTA CAGCGAATGA TCACCGCTCC CTGCATCCTC TTCCTGTTTT    60
ATGGCTGGCC TGGTTTGTTC CTGGAGTCCG CACGGTGGCT GATAGTGAAG CGGCAGATTG    120
AGGAGGCTCA GTCTGTGCTG AGGATCCTGG CTGAGCGAAA CCGGCCCAT GGGCAGATGC    180
TGGGGGAGGA GGCCAGGAG GCCCTGCAGG ACCTGGAGAA TACCTGCCCT CTCCTGCAA    240
CATCTCTCTT TTCCTTGTCT TCCCTCCCA ACCTCGAG    278

```

(2) INFORMATION FOR SEQ ID NO:430:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:430:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCTGTTTCATC TTAAATGCT    60
GTTTTCTCTG TTCAAAATGC CCTTCTCTAC CTTATCTACT TGTGCCACTG CATATTCTTA    120
AGGCTCAACT CAGGGTATCT TCCCTCGGAA ACCTTGTCTG ATCATCCTGG CCCCTCTGGC    180
GGACAGTAAT TTCTGCCTCT GTGCTCCCAT CACCTGAGCA CACCTGTATG GTGCTGCTGA    240
GCCCCTGAA TTGGCATTAT GGGCACGTGC GTCTCCTCCA TTCCATGGAG CTCCTCGAG    299

```

(2) INFORMATION FOR SEQ ID NO:431:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:431:

```

GTTACATGAC ACTGTTAATG ATTGCATTG GCTTGCTGTG GGGGCATCTC TTGCGGATCA    60
AACCCACGCA GAGCGTCTTC ATTTCCACGT GTCTGTCCTT GTCAAGCACA CCCCTCGTGT    120
CCAGGTTTCT CATGGGCAGT GCTCGGGGTG ACAAAGAAGG CGACATTGAC TACAGCACCG    180
TGCTCCTCGG CATGCTGGTG ACGCAGGACG TGCAGCTCGG GCTCTTCATG GCCGTCTATG    240
CGACTCTCAT ACAGGCGGGC GCCAGTGCAT CTTCTAGCAT TGTCGTGGAA GTTCTCCGAA    300
TCCTGGTTTT GATTGGTCAG ATTCTTTTTT CACTAGCGGC GGCTCTCGAG    350

```

(2) INFORMATION FOR SEQ ID NO:432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:432:

```

GAATTCGGCC TTCATGGCCT ACCAGGTTCT TGCTGCCCTG CGACTCCAGT ATCTGCAGGG    60
GGATTATACT CTGCACGCTG CCATCCCACC TCTCGAAGAG GTTTATTCCC TGCAGAGACT    120
CAAGGCCCGC ATCAGCCAGT CAACCAAAAC CTTCAACCCT TGTGAACGGC TGGAGAAGAG    180
GCGGACGAGC TTCCTAGAGG GGACCTGAG GCGGAGCTTC CGGACAGGAT CCGTGGTCCG    240

```

GCAGAAGGTC GAGGAGGAGC AGATGCTGGA CATGTGGATT AAGGAAGAAG TCTCCTCTGC 300
TCGAG 305

(2) INFORMATION FOR SEQ ID NO:433:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 273 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:433:

GAATTCGGCC TCATGGCCTA CTCCTCAGCC CCTCATCTTG CCTCCACCCA GCTGCTCCAT 60
 TTTTGCCACA TCGTGGCCCG CAGCCCCAGA GTCACGTGCC ATGTCACCAT CCTCCTCCTC 120
 CTTTGGAATC CTCTCCGCAC ACTGTGGCCC TTGTCTCAGG GCCCACAAGC TGAACGTGG 180
 CATAGCTCTC TCTTCTTCTC CAAGAAGACT CAGCAGCCTA CATTCCCATT CCTGGTATGT 240
 GCCATTGGGT TGGATGTCCC CACTATCTC GAG 273

(2) INFORMATION FOR SEQ ID NO:434:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 324 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:434:

CGAGTGAGCG GCGGGACAG TGCTTGTA ACTGAACACA ACAAAGTAT GGATATGGGA 60
 AACCAACATC CTTCTATTAG TAGGCTTCAG GAAATCCAAA AGGAAGTAAA AAGTGTAGAA 120
 CAGCAAGTTA TCGGCTTCAG TGGTCTGTCA GATGACAAGA ATTACAAGAA ACTGGAGAGG 180
 ATTCTAACAA AACAGCTTTT TGAATAGAC TCTGTAGATA CTGAAGGAAA AGGAGATATT 240
 CAGCAAGCTA GGAAGCGGGC AGCACAGGAG ACAGAACGTC TTCTCAAAGA GTTGGAGCAG 300
 AATGCAAACT ACCCACACCT CGAG 324

(2) INFORMATION FOR SEQ ID NO:435:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 548 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:435:

GAATTCGGCC TTCATGGCCT AAATGATCAA ATTTTGGCTT ACATATTTTG CAACAGTGGT 60
 ATAACACAAA GAAGTAAGCA AATATGGCAG AAGTGTGGTG GCTTTGGCGT CTACTTTTGA 120
 CCATAGTGGT GGCCCTGTTA TTCGTGGCTC CCGGGGTTCC TACACATCCT TCCCGATGGA 180
 AGAAGGGGTT GGCCAAAAAG GTCAGCCAGC TGATGGGTTG GACCAAGAAA GACAGAGTGA 240
 TAAGAATGAG TGACACCATG TTCTATCATT TTGTATTAGA TGCACCAAAA AACTATTCTG 300
 TTATTGTGAT GCTTACTGCT GCTCTCCAGC CGTTCAGTTC ATGTGTCTAG TGCAAAGGTG 360
 CTGCTGAAGA ATTTAGATC TTGGCAATT CCTATCAACG CCCTGGTGCA TTCACCACAA 420

AGGTATTTT TGCAATGGTG GATTATGATG AAAGCCCTGA GGTCTTTGAA GCGCTCCAGG 480
 TAACGTCACT TCCGAGTTTC TTCCACTTTT CTGCCCAATG GAAATTTACA ACAGATGACA 540
 GTCTCGAG 548

(2) INFORMATION FOR SEQ ID NO:436:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:436:

GAATTCGGCC TTCATGCGCT AAAATGAAAT TCAGACAAAA TCACTGGCAC CAAAAATGGT 60
 TTATTCTGAG CTGTCTTCAC TTTGACTATT TGGGGGGCTT CTCTCAAGTA CAGATGTGGG 120
 TTGGGGTCCC CTGGAGCAGG CAGGATTGGC AGTAAGAGAT ATTGGCCACT CAAGTCTACT 180
 GTGTGTGTGT GCCTCTGGAA GAGTGAAGAA TGGACTTCAA AAGTAACATC AAAAATCTAA 240
 CTGCCACCAT CCTGGAGACA TTTTCAGGG CTTTCCTTC AAGTCTTCA AGTACAGGAC 300
 ATCTCGAG 308

(2) INFORMATION FOR SEQ ID NO:437:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:437:

GAACAGAAGA GATCCCTCG GCGCCACGC CATATGACCA AAGTCACACC AGGTCAGAG 60
 CTGCCCCTC CCAATGGAAC CACCTTATCA TCTAACCTCA CTGGTGGCAT GCCCTTCATT 120
 GATGTGCCA CTCCCATCTC CTCTGCAAGT TCAGAAGCTG CCTCAGCAGT GGTCACTCCC 180
 TCTACAGACA GTGGCTGGA ATTCTCTCTC CAAACCACTT CCAAGGAAGA CCTTACTGAT 240
 CTAGAGCAAC CTGGCTCTCC AGGGTACAGC ACAGCTACAG AGCCTGGAAG CAGTGAGCTA 300
 GGTGTTCCCG AGCAGCCTGA CCTCCAGGAA GGGACCCATG TGGAAAAGTC CCACTCAGCA 360
 TCTGTGGAGT CCATCCCTGA AGTGTAGAG GAGTGCACGT CCCCTGCCGA CCACTCGAG 420

(2) INFORMATION FOR SEQ ID NO:438:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:438:

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCT TCTCACTGCA CCTGGATGGC 60
 AACGTGCTGG ACCACTTCTC GGAGCTGCGC AGCGTCGAGG GGCTGCAGGA GGGCTCTGTG 120
 CTGCGTGTGG TGAAGAGCC GTACACGGTG CGTGAGGCCC GCATCCACGT GCGCCATGTC 180
 CGAGACCTGC TCAAGAGCCT GGACCCATCC GATGCCTTCA ACGGGTTGA CTGCAACTCC 240

TTGTCCTTCC TGAGTGTCTT CACCGACGGC GACCTCGAG

279

(2) INFORMATION FOR SEQ ID NO:439:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:439:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCA	CCCAGCCTTC	TTCTTTTCAT	60
TATAACCTTT	ATACCACAGT	AAGCTGTTGC	ATCATTCAAA	TGACTCTGCA	TCCTATATTG	120
AATATTCTCC	ATTATTCTCT	AATATCTTTG	GGGGTACCCA	GGATTACAGG	GTTCTGGGCA	180
TACATGTAA	TGCTTTTGCC	AGGACTTTTC	TTTTTATTCA	TTGTCGTGAC	CCATTGTCTT	240
TGCTTATATT	TAAAGTTTTT	GCTCTTGATA	TCATTGGTTC	TTTCCTAAGT	CACTTTTCTT	300
GGTAACTGCT	TTGGAATGAA	TCATACATAT	CTCACTTACG	GAGCTCTCGA	G	351

(2) INFORMATION FOR SEQ ID NO:440:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:440:

GAATTCGGCC	TTCATGGCCT	ACCAATACTC	ATAATTAAAA	GTTTTTCGTT	GTCAAAACAT	60
TTTCACAGTT	CAGGAATCAC	AGTCCTATTT	CATCTTTTGA	AATAAAAGTT	AAAGTCCATT	120
TTTCTTAAGC	CTTATTATAC	CATTATCCAA	AAACACTACC	TAGCATTTCAT	CTTAGTTTTT	180
CATATCTCCT	TAGCAGATAG	TTTAGTATAT	TCCATTTGTC	TTATTGAGG	TTTAAAAAAA	240
GTGTGGAAG	AAGTTTCTCA	GGAGTTCAGC	AAGCCTTTCC	ATCTATCTTC	TATTTTAAAA	300
GAATGTGATT	TATTGTTTTT	ATGAATAAAA	TATACCTCGT	GTGTTTCTCA	TATGATGTTT	360
CATTACATTA	ATCATCCATT	AAGTAAATGT	TTTTGTGCTG	CAAAAACCTG	AG	412

(2) INFORMATION FOR SEQ ID NO:441:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:441:

GAATTCGGCC	TTCATGCCTA	GCCAGGAGGA	GGAGGACCCT	ATGAACAAAC	TCAAGGGCCA	60
GAAGATCGTG	TCCTGCCGCA	TCTGCAAGGG	CGACCACTGG	ACCACCCGCT	GCCCCACAA	120
GGATACGCTG	GGGCCCCATG	AGAAGGAGCT	GGCCGAGCAG	CTGGGCCTGT	CTACTGGCGA	180
GAAGGAGAAG	CTGCCGGGAG	AGCTAGAGCC	GGTGCAGGCC	ACGCAGAACA	AGACAGGGAA	240
GTATGTGCCG	CCGAGCCTGC	GCGACGGGGC	CAGCCGCCGC	GGGGAACTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:442:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 222 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:442:

GAATTGGGCC TTATGGCCT ACCGCCTCGC TGCCTGGACA CCTGTCCGTG CCACCCTGGT	60
CACTGAGCAG GACATCCGCG TCTGTGGCCC CTGGGACCCT GCGCCCGACA GCCAGGCCTG	120
GGTTTGTCTT TTAGGTAGA GTGCCTGGTC CAGGTCATTG GAGGAGAGTC CACATGGCCA	180
CCTCTGGCGT GTTCTAGAGA GGCCTCCCG TCTAGGCTCG AG	222

(2) INFORMATION FOR SEQ ID NO:443:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:443:

CTTTATGACA GCCATGAGCT TTTCCGGTG CATTGCAATT GTTTTCCAG TCCAGAACAT	60
TAATTTGGTT ACACAGAAAA AAGCCAGGTT TGTGTGTGTA GGTATTGGA TTTTGTGAT	120
TTGACCACT TCTCCATTTC TAATGGCCAA ACCACAAAA GATGAGAAAA ATAATACCAA	180
GTGCTTTGAG CCCCCACTAC TCGAG	205

(2) INFORMATION FOR SEQ ID NO:444:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 178 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:444:

GAATTGGGCC TTATGGCCT ACCTGCCTCC CTCCTTGCTT CTGCTCTGC TAACTCAACT	60
CTGCCTTCTT CTTTTTCATT CTTCTACTCT GCCCTATATG GAGGACAAAT GGACACCAGG	120
GGTGCTAACC TTATTGGTGC CTGCCCCAGC CTACCCAGG TGCAAGCAGA CTCTCGAG	178

(2) INFORMATION FOR SEQ ID NO:445:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:445:

GAATTCGGCC	TTCATGGCCT	AGAAAGCCAC	AAACTTTT	TTTAACT	TCAAAGGCTT	60
CTTTCTCTTT	AAAAAAATT	ATTTTAAATA	TAGAGTCAAA	AAATTGGATG	TATTATTTTG	120
AGCTTCTAAT	TGCTGCCACT	TGGAGATGTC	CAAGTAAGAA	GGCCTTCTTT	TTACATGGGA	180
TGAATTGTGC	ACTTCTACTG	ATGATGACTA	CAGCAGAAGT	GATGTTATAC	GTACAGGCAC	240
TTGAACTCGA	G					251

(2) INFORMATION FOR SEQ ID NO:446:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:446:

GAATTCGGCC	TTCATGGCCT	AGGGCTTATA	TTTAACTGA	ACTATTATTA	AATAAAAACA	60
AAATAAAATC	TTATCATATA	GGTGTAAATCT	GTTCTAAGGA	AAAAATCCTT	CTATCAAGAC	120
TAAACGTCTA	ACTGAATACA	GAATGACATT	TCATGCCTTA	AGGTCTCTGT	CCATGTTGTT	180
CCTTCTTTCT	ACTGTCCTTT	ACTGTATTAG	TTCAAACAT	TCTAATTCAC	TCTCCAAAAC	240
CCAATTCAAA	CATCACCATC	AGAAAGTCTT	CCATGATGGG	CCAGGTGTGG	CGGCCCTCGA	300
G						301

(2) INFORMATION FOR SEQ ID NO:447:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:447:

GAATTCGGCC	TTCATGGCCT	AGCTGAAATG	CTTCTATTG	GATACTATCT	GGGCATATTA	60
CTTCCTGTGG	TTCACTGTCT	GGGTGACAGG	ATTCATAGAA	GCCCAAACCT	TAGCACCAGC	120
CAGCATACCC	TTGTAACAAA	GCCACTCGAG				150

(2) INFORMATION FOR SEQ ID NO:448:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:448:

GAATTCGGCC	TTCATGGCCT	AATTTGATTT	TATTAGGTTT	AAATTGTATT	TCTTCAAATT	60
TCATAAACTA	TAGCATTTAT	CTCCATATTT	TTAATAAATG	ATCACAAATA	AATCACTGTT	120
AATATCTCCA	TTTACATTTT	TACAACTCCT	GCTATTGCTG	GATTTTTCAT	CCTATGATAT	180

GTAAACCAA TTAAATAC ATTTAAAGAA TCACAGCTGT CTCGAG

226

(2) INFORMATION FOR SEQ ID NO:449:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:449:

GAATTCGGCC TTCATGGCCT AAGACTGGGG GCATGTACCC CACCTACTTT CTGCACCTGG	60
ACCGTGAGGA TGGGAAGAAG GTAAGGTTGG TCTGGGCATG TTATCATCTA GGCTTTACAG	120
CCCTTTGAAA TCCTAGGGGC TGAAATGTGA CTGGAAGTCT CATATCTACC GCTGACCTCT	180
CAGTTCCTCA AAGAACTGC CTTGCTGTCT GGTCTGTGCA CATCTTTGTG TTTCCAGTG	240
CATTGTGTG TGTGCACATA TGTGCGTTTG GGAGCTGACG CAACGGAGAG AGTCTGTGTG	300
AGTGGCTCTC ATGACTGTGT GCAGACCAGA GGCTGAGTCT GGAATATGAC CTCATTCCAC	360
TCCCAAGGT GTTCTCTCTG GCGGGAAGGA AGAGAAAGAA GAGTAAACT TCCAATTACC	420
TCATCTCTGT GGACCCACA GACTTGTCTC GAG	453

(2) INFORMATION FOR SEQ ID NO:450:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:450:

GAATTCGGCC TTCATGGCCT AAAAGCAAAT TAAGTTGTTT TGAAAAGAAA GTATAGATTA	60
ATTTTGTGTTT CTGTTTAAAT TTTATCTCCT TGGTAAAGAT TTTTTCCTCC TGGGCAGAAA	120
ACTTGGCATT TTAGGCGTA GATACCTTAC CTTACAATGC CAAATGAAT TTAATTCCAG	180
TACTCAGGTT TTTCCCTTTA ACAGACTCTA TGTGTACCAG GCATGAATT CTAGACCTGC	240
CTCGAG	246

(2) INFORMATION FOR SEQ ID NO:451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:451:

GAATTCGGCC TTCATGGCCT AGTTTGGTGG GGTGAAGTT GATGGCAAAC TCATGGGAGA	60
CCTTCCAGTC TGGGGGTAAC TGGGCCCCGA ATCCCAGAGC TGGAAACATC TTATCACTGT	120
CGTAGTCTCT AATGATCTGC CCAACAGCCC AGATGGCCGA CAGATATTGC TTGGTGCCCA	180
TAGGGTTGAT ATAGTGCAA GAGGAAGGGT CGAGGGGATT CCCGTTGGAG GCTGTAAAGT	240
CTATTCCAAC GGTGAACATG AGCTGGCAGC CTCCCAGGAT GTAGTCAAGG AAGGAGTAGT	300
CTCGGTTTAT CTTGCAGGAT CGCAGGATGA TGATGCCCGA GTTTTATAG TTCTTCTTCT	360

TCCTCTGCTT CTGGGGTTG ATGCACTCGA ACTCCAGCGG GACGCTGTCT CGAG

414

(2) INFORMATION FOR SEQ ID NO:452:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:452:

GAATTCGGCC	TTCATGGCCT	ACACACTGAC	TGACAGACCA	CGGTATGCCT	TGCACCACCC	60
TGGCTGCTGG	GGTCCAAAGA	GGGATCTGGT	AGACCTGGGC	TGGAATCTCA	GCTTCACCAT	120
TTACCATCTG	GGTGGCCAAT	GGAGTGTTAC	TTGGCCTCTC	TGAGCCTCGG	TTTTGCTCGT	180
CTCTGAAACA	GTAAGATACC	TCCCTTTGGC	TGTTGTGATG	AGGATGAAGG	TTAGCCTATG	240
CCCAGTAGTA	TGCCTGTCCC	TTCATCGATG	CCTGCTCATC	TCACTCTTGC	TCTGGAAACA	300
CCCCTAGTAG	AGGCGCAGAG	GGGCAGGGCC	CACCCCACCC	ACCAAAACGT	GGTGCAGAAT	360
GAGGTGATCT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:453:

GCGTCCGTCC	GCCGCCACCA	CCCACTCCGG	ACACAGAACA	TCCAGTCATG	GATAAAAATG	60
AGCTGGTTCA	GAAGGCCAAA	CTGGCCGAGC	AGGCTGAGCG	ATATGATGAC	ATGGCAGCCT	120
GCAATGAAGTC	TGTAAGTCTG	CAAGGAGCTG	AATTATCCAA	TGAGGAGAGG	AATCTTCTCT	180
CAGTTGCTTA	TAAAAATGTT	GTAGGAGCCC	GTAGGTCATC	TTGGAGGGTC	GTCTCAAGTA	240
TTGAACAAA	GACGGAAGGT	GCTGAGAAAA	AACAGCAGAT	GGCTCGAG		288

(2) INFORMATION FOR SEQ ID NO:454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:454:

GAATTCGGCC	TTCATGGCCT	AAGAAGTGTG	TCCTGTATCC	ACCTCTTCCT	GGCCTCCCTT	60
CCCCCACTTC	CTGGTCCCTG	TCCACTCCTC	AGGTTGGTGC	TCTCACTTCT	TGAAAGCTCT	120
AGGCACCCCC	GCCTCCCGCC	AGGCTCCCCG	TTGGCTCCTG	GCAGGCCAGC	TGAGAATGAA	180
CAGGAGATGG	AGGCAGGCAG	CCCAGGCTGC	AGAGGTGAGG	GATGTGGGGC	CAGGCCCAGA	240
GGGCTCAGCC	TAGAGGCTTC	CAATCTCAGA	TTCTCCTGCC	TGTGGTCATC	TGTTTGTCCA	300
TCACCCAGG	ACAGGGCAGA	CAGAGGGGCA	AAGCACTGGG	GGCCCCAGAG	CCTAGCTTCC	360
CCTCAGCCTG	GGGAAACTC	GAG				383

(2) INFORMATION FOR SEQ ID NO:455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:455:

```

AGAGCACGTC AATGCCATGA GGGGCCTGCA AAGCAGCAAG GAGCTCAAGG CTGAGCTGGA      60
CGGGGAGAAG GGCCGGGACT CAGGGGAGGA GGCCCATGAC TATGAGGTGG ACATCAATGG      120
TTTAGAGATC CTTGAATGCA AATACAGGGT GGCAGTAACT GAGGTGATTG ATCTGAAAGC      180
TGAAATTAAG GCCTTAAAGG AGAAATATAA TAAATCTGTA GAAAACTACA CTGATGAGAA      240
GGCCAAGTAT GAGAGTAAAA TCCAGATGTA TGATGAGCAG GTGACAAGCC TTGAGAAGAC      300
CACCAAGGAG AGTGGTGAGA AGATGGCCCA CATGGAGAAG GAGTTGCAAA AGATGACCAG      360
CATAGCCAAC GAAATCACA GTACCCTTAA TACGGCCCGAG AATCTCGAG      409

```

(2) INFORMATION FOR SEQ ID NO:456:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:456:

```

GAATTCGGCC TTCATGGCCT AAATTTCTATG AAAAACAAT GGCTTAAACC CAGGGAAGCA      60
AGGATTATAA TTGATTTTTT TGAGCAATGT CTCTTTTGGT TACAAAGTAA AAGGTAAAAT      120
AAAAGTTTAA AAGCATTGCG AAAGAATGTT CTTTGGTTTT TCACTCAGT AACCTAAAGT      180
TTAATGACCC TTACAGTGC TGATAAACAC TTAAATTTTT GCAGTAGGCA TTGCTAGTTC      240
AAATTGAAGG AAGGTTGCCA GGCTCATGCC TATAGTCCCA ACTACTTAGG AGGCTAAGGC      300
AGGGGGACGC CCTCGAG      317

```

(2) INFORMATION FOR SEQ ID NO:457:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:457:

```

GAATTCGGCT TCATGGCCTA CTGCTCTTTG GCTAAGGTGG CAGTGTAACCT CTAGATCAAC      60
CTGGGCAACA GTCACAAGGG AGTGTGACTT CTGGGCCATA ATAAACTCAC TTGATAGTGT      120
TTATGTTATT AATCTGAATG CAACAGAAGA CAAAAGCACA GGCATGCACA CACACAGAAC      180
CCCAAACCAC TAAAAACTAC CTAAACACTG ACTTAGTAAA TAGTAAAAAG GTAATGTTGG      240
GACTTTTAAA CCTTGAATCC ATTAGCCAGG CTTGGGATGA AAGGACCATC TAAATCATG      300
CTAGTCTAAA CCATGCTCTT CCACACAGCT GTTTAAAAAC CACTGGGTAT GAGGAATATG      360
CTAGAAAGAA ATGTTAAAAA TAGATTGTTG GCTCACAATT ATTTTCTTAA TAAATAGGAC      420
CATTATTACT ACCAGGAAAG TCTTATTAT TTTGCTGAA ATTGGCTTAA AGAAAGTCTC      480

```

ATGACGGGAT GGGATGGGCC GGCACCTCGAG

510

(2) INFORMATION FOR SEQ ID NO:458:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 382 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:458:

GAATTCGGCC	TTCATGGCCT	AGCGGAAACA	ACTGAAACTA	ATGGAAGATA	TGGATACAGT	60
AATTAAACCC	CGTCCTCAAG	TAGTAAACA	AAAAAACAG	CGACCAAAT	CTATTCACAG	120
AGATCATATT	GAATCCCCA	AAACACCAAT	AAAGGGTCCT	CCAGTCTCTA	GCCTTTCTTT	180
GGCATCGCTG	AACACGGGTG	ATAACGAGAG	TGTACATTCA	GGCAAGAGGA	CGCCAAGATC	240
AGAGTCTGTA	GAAGGCTTCT	TATCTCCAAG	TCGTTGTGGC	AGTCGAAATG	GAGAAAAAGA	300
CTGGGAGAAT	GCATCAACAA	CTTCTTCAGT	GGCTTCTGGA	ACAGAATATA	CAGGACCAAA	360
GCTCTACAAA	GAACACCTCG	AG				382

(2) INFORMATION FOR SEQ ID NO:459:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 433 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:459:

GAATTCGGCC	TTCATGGCCT	ACTGAGTCCC	AGGCCGGGGC	CCTGCCCCAG	CCAGGGCTGG	60
GACTCTGCAG	TGGGAGCTT	GTCCAGCTGC	CCCCTCTAAT	GCTTTTCTCC	TCCAGGACAC	120
AGGGAGCCTC	CGGAAGCACA	GTAGTCCCG	TGTGTCACT	TAGGCTGACC	TCTGTCCCCA	180
GGGGTGACGT	AATGCTGTCA	CTGTCTTGAA	TTCTTCATCG	TTTAACAGGG	AGCCCAAGTGT	240
TTTACCAAAA	AGCAGAATTG	GATTTTTTTT	TTAAGTCGAT	AAATTTTAC	TCAAGGAATT	300
CCATGTTGTG	ATTTCTTCCA	CTGTCCATCA	AGGTCACCTT	AGATCCTCTA	AAGAGCTAGA	360
GTCAAAAGAT	TTATCTTCAA	GTTAGTCCTT	TTAATGAAA	CCGATGCTTA	TTTAAATCCA	420
GTCAGCCCTC	GAG					433

(2) INFORMATION FOR SEQ ID NO:460:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:460:

GTCCGGCTAA	AGTAATCCAG	TCACCTGCTG	CTGATACTAG	AAGGGCTGAG	ATGTCACAAA	60
CAAATTTTAC	CCCTGACACT	CTTGCCCA	ATGAAGGGAA	GGCTATGTCT	TATCAGTGTA	120
GCCTTTGTAA	GTTTCTATCA	TCATCCTTTT	CCGTGTAAA	AGATCATATT	AAGCAACATG	180
GTCAGCAAAA	TGAAGTGATA	CTGATGTGCT	CAGAGTGCCA	TATTACATCT	AGAAGCCAGG	240

AGGAACTTGA AGCCACGTG GTGAATGACC ATGACAATGA TGCCAATATC CACACCGAAC 300
TCGAG 305

(2) INFORMATION FOR SEQ ID NO:461:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 563 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:461:

GAATTCGGCC TTCATGGCCT AAGAAATATC AGTCCAAGCA AGAGGAATTA CAGAAAGATA 60
TGCAAGGAAG TGCACAGGCA TTGGCTGAAG TAGTGAAAAA CACAGAGAAC TTCTTAAAG 120
AGAATGGTGA AAAGCTGTCA CAGGAAGATA AGGCTTTGAT TGAACAGAAA CTTAATGAAG 180
CTAAGATAAA GTGTGAACAG CTTAATTTAA AAGCAGAACA GTCTAAAAAG GAGCTGGATA 240
AAGTTGTGAC AACAGCAATC AAGGAAGAAA CTGAAAAGGT AGCAGCAGTG AAGCAGCTGG 300
AAGAGAGCAA AACCAAAATA GAAAACCTTT TGGACTGGTT GTCAAATGTT GACAAAGACT 360
CAGAAAGGGC AGGGACAAAA CACAAACAGG TAATCGAACA GAACGGGACC CATTTC AAG 420
AAGGTGATGG CAAGTCAGCA ATTGGAGAAG AGGATGAAGT TAATGGTAAC CTGTTGGAGA 480
CTGATGTGA TGGGCAAGTT GGAACCACTC AGGAGAATCT GAATCAGCAA TATCAGAAAG 540
TTAAGGCCCA ACATGGACTC GAG 563

(2) INFORMATION FOR SEQ ID NO:462:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:462:

GCGGCTGTGA AGATGGCGGC GGCTGCGTGG CTTGAGGTGT TGCCTGTCAT TCTTCTGCTT 60
CTGGGAGCTC ACCCGTCACC ACTGTCGTTT TTCAGTCCGG GACCGGCAAC CGTAGCTGCT 120
GCCGACCGGT CCAAATGGCA CATTCCGATA CCGTCGGGGA AAAATTATTT TAGTTTTGGA 180
AAGATCCTCT TCAGAAATAC CACTATCTTC CTGAAGTTTG ATGGAGAACC TTGTGACCTG 240
TCTTTGAATA TAACCTGGTA TCTGAAAAGC GCTGATTGTT ACAATGAAAT CTATAACTTC 300
AAGGCAGAAG AAGTAGAGTT GTATTGGAA AACTTAAGG AAAAAAGAGG CTGTCTGGG 360
AAATATCAAA CATCATCAA ATTGTTCCAG AACTGCAGTG AACTCTTTAA AACACAGACC 420
TTTTCTGGAG ATTTTATGCA TCGACTGCCT CTTTATAGGAG AAAACAGGA GCTCGAG 477

(2) INFORMATION FOR SEQ ID NO:463:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:463:

```

GTTGCACTCC TGTGTACTC TTTTAGAGGT GGAAAAGAGG TGGATACTGA GATCTAAGAG      60
GAAAGGATAG TCATTACGCT TCTGAGATAT GCGCTCTCTC TATTGTTCTC GAACACAAAG      120
GGATAGTCTC TTTTCTGGAG CTGATGTCCC TGCTTGGAGG TTAGCCCCAA AACATGGCTC      180
TTGTATTGTT CTAAGAGAAA AGGCTTTCAT TTTGGTTCTT CTGATTGGTG TTACCTACTG      240
CCTAATATGT GTTCATTTTT TGACAGAGAG GCAGACTATT GAAAAAGTCT GTGTGAACAG      300
AGAGCAGTTC ATTAAGCCCA TTGCTTTCAG TAATGTGGCC TTGACCCCTT CTGCTTCCCC      360
CTTCTCCCAT GACGAGCTCG AG                                         382

```

(2) INFORMATION FOR SEQ ID NO:464:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:464:

```

GGACCTGCCT CAAGGACATG GGTGGACATA TGGGCGGACT CTCAGGGACA ACCAAAGTGA      60
TGATCACACT GACCGATGTC AATGACAACC CACCAAAGTT TCCGCAGAGC GTATACCAGA      120
TGTCTGTGTC AGAAGCAGCC GTCCCTGGGG AGGAAGTAGG AAGAGTGAAA GCTAAGATC      180
CAGACATTGG AGAAAATGGC TTAGTCACAT ACAATATTGT TGATGGAGAT GGTATGGAAT      240
CATTTGAAAT CACAACGGAC TCTAAACAC TCGAG                                         275

```

(2) INFORMATION FOR SEQ ID NO:465:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:465:

```

GTTCTAGACC TACCCCGAAC AGCCCCAAAC AGTCAGAGTG GCACAAAATG ACAGTCTCCA      60
AAAAC TGCCC CGACCAAGAT CTCAAAATCA AACTTGCTGT CCGAATGGAT AAGCCTCAA      120
ACATGAAGCA TTCTGGGTAT TTATGGGCCA TCGTAAGAA TGTCTGGAAG AGATGGAAGA      180
AAAGGTTTTT TGTATTGGTG CAGGTCACTC AGTACACGTT TGCCATGTGC AGTTATCGGG      240
AGAAGAAAGC GGAGCCTCAG GAACTTCTAC AATTGGATGG GTACACTGTG GATTACACCG      300
ACCCCCAGCC AGGTTTGAG GGTGGCCGAG CCTTCTTCAA TGCTGTCAAG GAGGGAGACA      360
CCGTGATATT TGCCAGTGAC GATGAACAAG ACCGCATCCT GTGGGTCCAG GCCATGTATC      420
GGGCCACGGG GCAGTCACAC AAGCCTGTGC CCCCAGCCCA AGTCCAGAAA CTCAACGCCA      480
TCCTCGAG                                         488

```

(2) INFORMATION FOR SEQ ID NO:466:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:466:

```

GAATTCGGCC TTCATGGCCT AGCCGCTGCG GTGAGCCTTG AAGCCTAGGG CGCGGGCCCCG      60
GGTGGAGCCG CCGCAGGTGC AGATCTTGGT GGTAGTAGCA AATATTCAAA CGAGAACTTT      120
GAAGGCCGTC TGAGCTAAAA AATAATGCTG ATTTGGCCTC ATCATATTTA TGAAGGAGGG      180
AGAAATAGAA GCATGTATAA TGTAGAAAAA CATATCTTAT CCTTATGTTT GCATATATTG      240
TTGAATAAAT ATAGTTTAAT GAATATGTTT TCTCACCTTT CTTTGCTTGC ACTTCTCGAG      300

```

(2) INFORMATION FOR SEQ ID NO:467:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:467:

```

GTTCTAGACC TGCCTCGAGA TATGCCGAA GGTGTCATGG CTGGTCCCAG GGCCAGCACA      60
GGCCCGAGGC CGGGCTGCCT GGTTTTATTT TTATTTAACT TTATTTTCTG TTTTATGAGT      120
GTGTGTCCGC CCACCCCCAC CCCCTTCAGT GTTAAGTGGG GAGCCCTGGG GGAGTCTCTC      180
CTGCCTCCCA GCCTCTCCCA AGACCTCCCC CCTCGTCACC AGCCATCCCT CTGGACCAGG      240
CAGAGGGCGG ACCGGGTGGG CAGGGGCCTG AGGGTGGCTC GGGCCAGCCC ACCAGCCAAT      300
GGACCCCTCC TCAGGCCGCC AGTGTGCCCC TGCCCCTTT TAAACAAAA TGCCCTCGTT      360
TGTAACCCT TAACGCTCGA G                                     381

```

(2) INFORMATION FOR SEQ ID NO:468:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:468:

```

GCTGTCCAAT TATACTGACC TGGCCATGAG CACGGTGAAG CAGACCCAAG CCATTCCATA      60
TACTGGTCCC TTTAATTGTC TCTGTTACCA GCTGCAGAAA TTGACAGGTG ATGTGGAAGA      120
ATTAGAAATT CAAGAAAAAC CTGCTCTGAA AGTGTTCAAA AATATTACTG TAATACAAGA      180
ACCAGGCATG GTGGTATTAG AATGGCTGGC AAACCTTCT AATGATATGT ATGCAGATAC      240
AGTAACAACT GTGATATTGG AAGTTCAGTC AAATCCCAA ATAAGAAAAG GCGCAGAACT      300
CGAG                                     304

```

(2) INFORMATION FOR SEQ ID NO:469:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:469:

```

GCGATTGAAT TCTAGACCAC CCCGCACTCC AGCCTGGGCA ACAGAGCAAG ACTCTTTCTT      60
AAAAAATTA AAAAAAAG GAGTACCCAT TGGGATAAAC CTCTTTGGAG GAGAGGACAT      120

```

```

AGTACAGAGG TTATACTGCA ACATGGACCC ACCAATAGCC ATGGATAACT TAGTTGGGAT 180
TACCCCTGCC TGCTGTTTAG ATACTTACAT GGACACTAAT TTCTGCCCAT CAACCTCCCT 240
CTCTTTCTCC TTCAATGCCC ATCAACCTCC CCTCTTTCT CCATCAATGC TATGTTGGTT 300
TTTTTTATTT GCCATCTTGG CAGGTTTAGG GCAGAGCATG CTCGAG 346

```

(2) INFORMATION FOR SEQ ID NO:470:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 321 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:470:

```

GAATTCGGCC TTCATGGCCT AGGATTTTCA GCAAGAATTA AATTATTCTG CATATTGGAC 60
AGGGCCTATT TAGAGGCGTG CACATCTGTT TTTATCCATT TGTGTAACGA TACCGTGTGT 120
GAAAGTAGGT TCATGGATCA GATGAGAAAA GTCAATTCTC TAAGATACCT TCCCTTGTGG 180
CTGTGGATTG TCACCTTGAT GATTGAGCTT TGTGTGATGG AGGTGTCTGC CAGAGAATTC 240
CTGGCCACCC AGCTCCTCAG CCCTCTGCCC CCACCCCAA TACACACACC TTTCTCCATT 300
GTACCAGATG CTGGTCTCGA G 321

```

(2) INFORMATION FOR SEQ ID NO:471:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 417 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:471:

```

GAATTCGGCT TCATGGCCTA CTTCAATCAC TGTAAACCA ATAGCAAACA ACGGAAGAGA 60
CGGGCAGAGT TGAAGCAACA AAGAGAGGAG GAGGCAACAT GGCAAGAGCA GGAAGCCCCT 120
CGGAGAGACA CTCCCACCGA AAGTTCTTGC GCAGTGGCCG CCATTGGCAC CCTGGAAGGC 180
AGCCCCCAG GTATCTCCAC CTCCTTCTTT AGGAAGGTGC TGGGCTGGCC CCTCAGGCTG 240
CCGAGGGACC TGTGTAAGTG GATGCAGGGA CTCCTGCAAG CTGCTGGCCT CCATATCAGG 300
GACAATGCTT ACAACTACTG CTACATGTAC GAGCTCCTGA GCCTGGGGCT GCCACTCCTC 360
TGGGCGTTCT CTGAGGTCTT GGCAGCCATG TACAGGGAAT CTGAGGGGCTC CCTCGAG 417

```

(2) INFORMATION FOR SEQ ID NO:472:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 331 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:472:

```

GAATTCGGCC TTCATGGCCT ACAAGAGGCA GCTTATAGAC AACCGCAAGC TCATTGAGAC 60
GCAAATGGAA CGGTTCAAAG TTGTGGAACG AGAGACCAAA ACCAAAGCTT ACAGCAAAGA 120
GGGCCTGGGC CTGCCCCAGA AGGTAGATCC TGCCCAAGAG GAGAAGGAAG AGGTTGGCCA 180

```

```

GTGGCTCAGC AATACCATCG ACACGCTCAA CATGCAGGTG GACCAGTTTG AGAGTGAAGT    240
GGAGTCACTG TCAGTGCAGA CACGCAAGAA GAAGGGCGAC AAGGATCAGA AGCAGGACCG    300
GATTGAGGGC TTGAAGCAGC AGCATCTCGA G                                     331

```

(2) INFORMATION FOR SEQ ID NO:473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:473:

```

GAATTCGGCC TTCATGGCCT AGAGGTGCTT CAGTGGTACA ATCAGTTAGC ACACAGTACG    60
TATACAGCAG TATGTGTGTG AGAAATTATT TTAAATATAA GAATTATCAA AAATTATAAG    120
AAGACCATCC CTTTAACTGA ATAGTTTCAC CAAAAATCAG AAAAATATGT AAGTGATACA    180
TTTTGTTTCT TGGATATAGC AATGTACCAC CTTGCATAAA TGAGACTATT AAAATGATCA    240
CCTGAGGTCA GAAGTTCGAG                                     260

```

(2) INFORMATION FOR SEQ ID NO:474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 511 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:474:

```

GAATTCGGCC TTCATGGCCT ACAAAGATTT GAGGAAAAGA GGTTCAAATT GGACCACTCA    60
GTGAGTAGCA CCAATGGCCA CAGGTGGCAG ATATTTCAGG ATTGGTTGGG AACTGACCAA    120
GATAACCTTG ATTTGGCCAA TGTCAATCTT ATGTTGGAGT TACTAGTGCA GAAGAAGAAA    180
CAACTGGAAG CAGAATCACA TGCAGCCCAA CTACAGATTC TTATGGAATT CCTCAAGGTT    240
GCAAGAAGAA ATAAGAGAGA GCAACTGGAA CAGATCCAGA AGGAGCTAAG TGTTTTGGAA    300
GAGGATATTA AGAGAGTGGG AGAAATGAGT GGCTTATACT CTCCTGTCAG TGAGGATAGC    360
ACAGTGCCTC AATTTGAAGC TCCTTCTCCA TCACACAGTA GTATTATTGA TTCCACAGAA    420
TACAGCCAAC CTCCAGGTTT CAGTGGCAGT TCTCAGACAA AGAAACAGCC TTGGTATAAT    480
AGCACGTTAG CATCAAGACT GAAAACTCGA G                                     511

```

(2) INFORMATION FOR SEQ ID NO:475:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 610 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:475:

```

GAATTCGGCC TTCATGGCCT AGTCACAGCT GTCTATTTTT GTCAGTGTGCG GAACATTGTT    60
CATCGTGATT TAAAAGCTGA AAATTTACTT CTGGATGCCA ATCTGAATAT CAAAATAGCA    120
GATTTTGTTT TCAGTAACCT CTTCACTCCT GGGCAGCTGC TGAAGACCTG GTGTGGCAGC    180

```

```

CCTCCCTATG CTGCACCTGA ACTCTTTGAA GGAAAAGAAT ATGATGGGCC CAAAGTGGAC      240
ATCTGGAGCC TTGGAGTTGT CCTCTACGTG CTTGTGTGCG GTGCCCTGCC ATTTGATGGA      300
AGCACACTGC AGAATCTGCG GGCCCGCGTG CTGAGTGGAA AGTTCGCAT CCCATTTTTT      360
ATGTCCACAG AATGTGAGCA TTTGATCCGC CATATGTTGG TGTAGATCC CAATAAGCGC      420
CTCTCCATGG AGCAGATCTG CAAGCACAAG TGGATGAAGC TAGGGGACGC CGATCCCAAC      480
TTTGACAGGT TAATAGCTGA ATGCCAACA CTAAGGAAG AAAGACAGGT GGACCCCTG      540
AATGAGGATG TCCTCTTGGC CATGGAGGAC ATGGGACTGG ACAAAGAACA GACACAGAAG      600
GCGGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:476:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:476:

```

GGAGATTGGC CACCTCCAAG ATATGGTAAG GAAAAGTGAA CAAGGTCTTG GCTCTGCAGA      60
AGGACTTATT GCTAGTCTTC AGGACTCCCA GAAAAGGCTT CAGAATGAGC TTGACTTGAC      120
TAAAGACAGC CTAAGGAGA CCAAGGATGC TCTATTAAAT GTGGAGGTG AGCTAGAACA      180
AGAAAGGCAA CAGCATGAAG AAACAATTGC TGCCATGAAA GAAGAAGAGA AGCTCAAAGT      240
GGACAAAATG GCCCATGACT TAGAAATTAA GTGGACTGAA AATCTTAGAC AAGAGTGTTT      300
TAAACTTCGT GAAGAGTTAA GGCTTCAACA TGAAGAGGAT AAGAAGTCAG CAATGTCTCA      360
ACTTTTGCAG TTGAAAGATC GAGAGAAAAA TGCAGCAGAG AAACCTCGAG      409

```

(2) INFORMATION FOR SEQ ID NO:477:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:477:

```

GTATGCCTGT TCCAGACCAG CCTTCATCAG CCTCAGAGAA GACGAGTTC CTGAGCCCCG      60
GCTTAAACAC CTCCAACGGG GATGGCTCTG AAACAGAAAC CACCTCTGCC ATCCTCGCCT      120
CAGTCAAAGA ACAGGAATTA CAGTTTGAAA GGCTGACCCG AGAGCTGGAG GCTGAACGGC      180
AGATCGTAGC CAGCCAGCTG GAGCGATGCA AGCTCGGATC CGAGACTGGC AGCATGAGCA      240
GCATGAGTTC AGCAGAAGAG CGGATACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:478:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:478:


```

GAATTCGGCC TTCATGGCCT ATGCGTGGGG GTGGGGGGGC AGGCTAGAAA GGAGCCCTCC      60
CTCCTCGGGG TGTCTAGGGT GTGCTGGCCA CTGGAAGATT GGAGTCGCTG ACCCAGTGCT      120
GACCCTGACC CTTGGCTGGG TCCACTCTGC AGACTCCACC TGAGGAGACC CACCCAGGGT      180
GAAGCTCGGT GCCCAGGCCT GAACTGAGCC CGGCCGGGTG CAAGGGCTGA GGTGTGAGGT      240
CGGCCCAGGC CTCTTCCAG GCCTGAGGGT GGCTACAGCT CGAG                          284

```

(2) INFORMATION FOR SEQ ID NO:479:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:479:

```

GAATTCGGCC TTCATGGCCT ACTAAATTTT CAAAACGTT GATTTGCATA ATACAGTGGT      60
ATGTGCAATG GATAAATTGC CGTTATTTC AAAATTAAAA TTCTCATTTT CTTTCTTTT      120
TTTCCCCCT GCTCCACACT TCAAACTCC CGTTAGATCA GCATTCTACT ACAAGAGTGA      180
AAGGAAAACC CTAACAGATC TGTCTAGTG ATTTTACCTT TGTTCTAGAA GCGCTCCTT      240
TCAGGTTGT GGTATTCTTA GGTAGCGGA GCTTTTCTT CTTTCCCCA CCCATCTCCC      300
CAATATTGCC CATTATTAAT TAACCTCTT CTTTGGTTGG AACGACCTCG AG                          352

```

(2) INFORMATION FOR SEQ ID NO:480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:480:

```

GAATTCGGCC TTCATGGCCT ATTAAAAGAA TGTTCTTTCA TTAAAAGACC AAAAGAAGT      60
TAAACTTAA ATTGGGTGAT TTGTGGGCAG CTAAATGCAG CTTTGTTAAT AGCTGAGTGA      120
ACTTTCAATT ATGAAATCTG TGGAGCTTGA CAAATCACA AAAGGAAAT TACTGGGCA      180
AAATTAGACC TCAAGTCTGC CTCTACTGTG TCTCACATCA CCATGTAGAA GAATGGGCGT      240
ACAGTATATA CCGTGTCTC GAG                          263

```

(2) INFORMATION FOR SEQ ID NO:481:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:481:

```

GGAGCAGGAA GAAATGCAAG AGGAGATGGA GAAGCTGCGA GAGGAAAACG AGACTCTCAA      60
GAACGAGATC GATGAGCTGA GAACGAGAT GGACGAGATG AGGGACACTT TCTTCGAGGA      120
GGATGCCTGT CAACTGCAGG AAATGCGCCA CGAGTTGGAG AGAGCCAACA AAAACTGCCG      180
GATCCTGCAG TACCGCTCC GCAAAGCCGA GCGCAAAAGG CTCGCTACG CCCAGACCGG      240

```

GGAAATCGAC GGGGAGCTGT TGCGCAGCCT GGAGCAGGAC CTCAAGGTTG CAAAGGATGT 300
 ATCTGTGAGA CTTCAACCATG AATTAGAAAA TGTGGAAGAA AAGAGAACAA CAACAGAAGA 360
 TGAAAACGAG AATCTCGAG 379

(2) INFORMATION FOR SEQ ID NO:482:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:482:

GAATTCGGCC TTCATGCTTT CTAGGCAAGA GGTCAACAGA AGATTGAGAG AAAGAGGAGA 60
 ACCAATCAGA CTATTGGAG AGACTGATTA TGATGCTTTT CAACGTTTAA GGAAAATAGA 120
 GATCCTCACA CCAGAAGTTA ACAAGGGATT GAGGAATGAT TTGAAAGCAG CCTTGGATAA 180
 GATTGATCAG CAGTACCTCA ATGAAATCGT CGGCGGTCAG GAGCCTGGAG AGGAAGACAC 240
 ACAGAATGAT CTGAAAGTTC ATGAGGAAAA CACCACAATT GAAGAGTCAG AGGCCCTCGA 300
 G 301

(2) INFORMATION FOR SEQ ID NO:483:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 168 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:483:

TGGTCTCCAG AAATGCTTTG GGTTCATCTT TCATTGCTGC AAGGAACTTC CATGCCTCTA 60
 ACACTCATCT TCAAAAGACT GGGACTGCTG AGATGTCCTC TATTCTTGAA GAGCGTATTC 120
 TTGGAGCTGA TACCTCTGTT GATCTTGAAG AAAGTGGGCT ATCTCGAG 168

(2) INFORMATION FOR SEQ ID NO:484:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:484:

GCAAGCTCTC CATGGAAACC CCTGCCAAAA CAGAAGAGAT AAAACTGGAA AAGGCTGAGA 60
 CAGAGTCCTG CCCAGGCCAA GAGGAGCCTA AATTGGAGGA ACAGAATGGT AGTAAGGTAG 120
 AAGGAAACGC TGAGCCTGT CCTGTCTCCT CAGCACAGAG TCCTCCCAT TCTGCTGGGG 180
 CCCCTGCTGC CAAAGGAGAC TCAGGGAATG AACTTCTGAA ACACTGTGTG AAAAAATAAAA 240
 AGTCATCTTC TCTTTTGAAT CAAAAACCTG AGGGCAGTAT TTGTTGAGAA GATGACTGTA 300
 CAAAGGATAA TAAACTAGTT GAGAAGCAGA ACCCAGCTGA AGGACTGCAA ACTTTGGGGG 360
 CTCAAATGCA AGGTGGTTTT GGATGTGGCA ACCAGTTGCC AAAACACAGT GGAGGAAGTG 420
 AAACCAAGAA ACAGCGAAGC AAAGGACTCG AG 452

(2) INFORMATION FOR SEQ ID NO:485:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 352 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:485:

```

TTTGTAAT CACCTGATGA TGGTGATATA GCTGTGGCCA ACGAAATGTC AAGGGAAGTC      60
TGCTGGGGAA GGTAGACGTA GGATAGGAGT ATGGGAAAAA ATTATTCACT CAAAAGCATG      120
ATGCACAGAG GAGCTATGAT CTTTCTTGT TTTCTCACT GGATGTTGTC ATGTCTGTAT      180
GTACTTCCTG GAACTGTGGC ACCATCTTAC AACCATGAAA GGAGCTCACA TGAAATCATG      240
TTGAACATAG CAGAGCGGGA AGATGGAAGG AATCCGAGAT CTATGTTTGA TGTTAAGCGA      300
TGATGTTAAA AACTTAAAAA ACTCCAGAAC TCTCTTACCC CTGGTGCTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:486:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 420 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:486:

```

GAATTCGGCC TTCATGGCCT ACTCAGCTGG AAGCTTTACT CCTCCTCGA CAGAAAGTGA      60
GGATTACAGA TGACATGGAT CAGGTGGAGC TGAAGGAGTT TTGTCCCAAT GAGCAGAACT      120
GGCGTCAGCA CAGGGAGGCC TACGAGGAGG ACGAAGACGG GCCCCAGGCT GGAGTGCAGT      180
GCCAGACGGC ATGACGTGGT GCGGGGCAGC GTGGCCCCAC CGGACTAGCA CATGATGAAT      240
GTAAAGTTGG CACAATGAAA ATGACATCGC TTAAATGGCC TTGTGTTTGG GATGTCCTGT      300
GTATGTGTTT AGCATTCTTA ATTGCTGAGT GTCITTTTGG CTTTCTTTT GGTGTGAACT      360
TAAGTTATAG CTTAATTTAT ATTTAAATGT TTAAAGTATA AATCACCTCT AGGCCTCGAG      420

```

(2) INFORMATION FOR SEQ ID NO:487:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 318 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:487:

```

GGAGTGTCAA GAATAACCGC TCAGGTTGAG TGTAATAATA TTTTATGGTC CCATCAGCAT      60
CAACCTGCCT TAATGCTTCT TTGGTTGTCT CTTCAAGTAG TTCTTATTTT ACAGCACATG      120
ATATATGAAG TGATTTCACA CCATGCCCAA GATACGGGCC ACCCACCAGC TACATGGCAT      180
GATGACTCTG CAGGCCGAAC GGCAGCCTTG ATAATTATAA GGCCATGGGT AATAGCCCCC      240
CAGGGGTTCA CAGATCTTCT GGCAGTGGGT GTAGCTCCGC CTACATTCTA TACAACAGAT      300
TCCTTCGCCT GCCTCGAG              318

```

(2) INFORMATION FOR SEQ ID NO:488:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:488:

```

GAATTCGGCC TTCATGGCCT AGGTGTTTGC TTAAAGGAGG AATAGAAAAA TCAGGTGGTC      60
ACTACTACAA GGGAAAGGGG AATGTGGTTT CAAAAGGGT TTTGCCTTAT TTATTTTAT      120
AGTAGATACT TATTAATCAA ACATTTAAGA GCAACTCAGT AAGTATTGT CCAGAATGAA      180
CTGTCTCAA GACTAGGTTT ACTGCTTGAC ATTAGAGGTT AAGGTGTTGC AATTCTGAGT      240
CTTGTTTTTT ATTACTACCA ACCCCACCC CCGCCGATAT TACTTCATCT CCCTCCAAGG      300
TCACTGAAGT TTTTCATAAC TATTTAACA GATATTGCAA TAAATGTACA GTAATTTAAC      360
TATCCTTCTT GCTGGGCATG TCAAAGTGT TTCTATTATT ACAGATAATG CTGCAATGAA      420
TCTTTATTTA TATAATACAC TTTTATCCAG TTGTCATTTT TTCTTTGTCT TATATTCTCA      480
CATGGAA                                           487

```

(2) INFORMATION FOR SEQ ID NO:489:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:489:

```

GCGATTGAAT TCTAGACCTG CCTCGAGACA AAAACTGTGA ATAGTGAGTG ATTAAAAAA      60
AAAAAATAAA CTGAAAGGAA AATTGTTGAA TGTTTGAATC TTGCCTAGTC CCCTCACCCC      120
CAAGGCTGGC TTCTAGAGTT AAGCTCGAG                                           149

```

(2) INFORMATION FOR SEQ ID NO:490:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:490:

```

GCAAATTTTG GAAGATTAG ACCATTATTT CTCAAAATAT TTCTACCTG CTCTCTCCTC      60
TTTCTCCAC TCCTCCCAT CACCTTCTGG CACTTCCATT GTTCATATAT TGATATGCTT      120
AATGATGTTT CTGAAGATTT ATTCATTTT CCTTTATTCC TTTTATTCT GTTCCTCAGC      180
CCAGATCATT TCAATGCACA TATCCTCAAG TTTGCTGATT CTTTCATTTC CTGCTCAGAT      240
CTGCTGCTGG CCCCTCGAG                                           259

```

(2) INFORMATION FOR SEQ ID NO:491:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:491:

GAATTCGGCC	TTCATGGCCT	ACAAATGTTT	AATCAGAGAC	TCATATTCAC	CTTTAAGTAA	60
AAAACATACT	TCTTTCCCCC	TAATAGTCAC	AGCATTCTGC	AGAGCTAAAG	AAGGAGACCA	120
GGAGTCTGTG	GGAGCAAAGA	TCATTTTGTG	AAGCTAGAGG	TCCAATTTAA	AAGCAGTTGC	180
TGCTACAAAT	TAAACATAT	TGCAATTCTG	CCTAAAATAG	TTGTCTCTTT	GAACGTTGGG	240
TGCCTTTT	AGGTTGCTTT	GTGAATAATA	TGCACAAAAT	GAAATGTTA	AAAAAACAT	300
GTAGCCTGCT	AACCTCGAG					320

(2) INFORMATION FOR SEQ ID NO:492:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 224 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:492:

GAATTCTAGA	CCTGCCTCCA	GCCACTTCAA	ACCTTTGGTG	ACCAAAGTGG	GGTAAAAACA	60
AGCACCTGCG	TGCGTTGTGG	TTATTCTATG	CTCTCCAATA	TATATAAATT	TTAAGAAGTT	120
TTTCTTGAGG	TGGTCAGTTC	TAAACCAAG	AAAGTGGTAG	TAGTTGATTT	TAATTAGTGT	180
AAAGTTGTCT	TCGTAACCTC	CGTGTGGTT	GGAAATAGCT	CGAG		224

(2) INFORMATION FOR SEQ ID NO:493:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 320 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:493:

GAATTGCCTT	CATGGCCTAC	CGAATCAGAC	AGAAGAAAGC	CCAGGGCTCC	ACTTCTTCTA	60
CAAGGTTGCA	TGAGCCCGAG	AAGAATGCCA	GAGAAATAAC	ACAGGACACA	AATGATATCA	120
CATATGCAGA	CCTGAACCTG	CCCAAGGGGA	AGAAGCCTGC	TCCCCAGGCT	GCGGAGCCCA	180
ACAACCACAC	GGAGTATGCC	AGCATTCAGA	CCAGCCCGCA	GCCCCGCTCG	GAGGACACCC	240
TCACCTATGC	TGACCTGGAC	ATGGTCCACC	TCAACCGGAC	CCCCAAGCAG	CCGGCCCCCA	300
AGCCTGAGCC	GTCCCTCGAG					320

(2) INFORMATION FOR SEQ ID NO:494:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 504 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:494:

```

GAATTCGGCC TTCATGGCCT AGGTAGCTCT ATGGTTTTC TCGCGTTCTT GAGTCGGGAA      60
ATGGCCGCTG TGTGGTTGCA ACGGAGATAA ATTCCCGGAA CCGCGATTCT GCGTGTCTCAGG    120
AATTCGAATT TAGAGTTTAA TTTCTCAGAG CATTCTCTCC AGGAAGAATT TTTACAGTAT      180
CTCAAAGACT TCACTTGACT TCTTGATCCT GCATAAAACC AAGGAGAAAA GAAATGGGTC      240
GCTCCAATTC TAGATCACAT TCTTCAAGGT CAAAGTCTAG ATCACAGTCT AGTTCTCGAT      300
CAAGATCAAG ATCTCATTCT AGAAGAAGC GATACAGTTC TAGGTCTCGT TCCAGAACAT      360
ATTCAAGGTC TCGTAGTAGA GATCGTATGT ATTCTAGAGA TTATCGTCGC GATTACAGAA      420
ATAATAGAGG AATGAGACGA CCTTATGGGT ACAGAGGAAG GGGTAGAGGG TATTATCAAG      480
GAGGAGGAGG TAGAAACCCT CGAG                                         504

```

(2) INFORMATION FOR SEQ ID NO:495:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:495:

```

GAATTCGGCC TTCATGGCCT ACCAAGCTTAG TCATTGAAG CCCAAGAGTC TAATTTTATA      60
TGCCCTGCCA ATGTCCTCAT CTATTGCAGA ATGNATAATT ATCTATTGT TTTGGACTAT      120
ATGTTACAAA AATTAAAAC ATAAGATCCT CTCTCTATAT TTCATTATTG GTGAACCCAC      180
ATTGCTCGAG                                         190

```

(2) INFORMATION FOR SEQ ID NO:496:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:496:

```

GAATTCGGCC TTCATGGCCT AGGTAAGAAA ATCGTCAATG AATTGTGGCA TGACCAGGTG      60
GAGAGTAAGT GTCATAAAGA GGGATAGTGG ATAGTATAAT GTCAGGCACC TCAAAGGAAC      120
TGGGCAGGGA GTTAGGGAGT AAAAAGGGCG GTGGTCTGGA AGCAGAAAAG AGGAGCAGTG      180
GTCCAGTAGG GGCTGCAGAG CTGCAAGGCT TTGCCTCAAT CCTGTCAAAG GCAACTTCAA      240
GCTTTCAGG AGCCATACTC CTTCAATTGT TCATTACTTT CTAGATTAGG AAATCACCAC      300
TCGAG                                         305

```

(2) INFORMATION FOR SEQ ID NO:497:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:497:

```

GAATTCGGCC TTCATGGCCT AGGTGGACCA ATGTACAGCA CTCAGGTTCA TGGCCAACTG      60
GGTGGACTAT TTCAGTACTC TACAGGTGCC TCAGTGGAGG GAGAGCCCAT TGTCCAGGTG      120
CTTCCTGGGA CAATACCAGA GCGCTCTGGG AAAAGGGCTG CTGTCAGGCA CGAGGGCTCA      180
CAATGAGCCA TGGTGGGCCA CCGCCACGGC CCATGCAGCC TAATAGCAAG CCAAGGCAGG      240
AAGCTGTGAG AGCTGCTCAA CAGTGCCCCC TAGGGACTGG TTACTTCCTG ACCCTAACCT      300
CCGGAATCT GCTGTCAAAG GCAGATTCTT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:498:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 160 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:498:

```

GAATTAGGGG CTTTTTCATC CTTAGGAGAC CTGAGTCCTC AAGAAAACCC TTTTCTGGAA      60
GTATCTGCTC CTTCAGAACA TTTTATAGAA AAGAATAATA CAAAACACAC AACTGCAAGA      120
AATGCCTTGG AAGAAAATGA TTTTATGGAA AACACTCGAG                                     160

```

(2) INFORMATION FOR SEQ ID NO:499:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:499:

```

GAATTCGGCC TTCATGGCCT ACTCGATCTC CTGACCTCGT GGTCCACCCG CCTCGGCCTC      60
CCAAAGTTCT GGGATTACAG ACGTGAGCCA CCGCGCCCGG CCTTGTCTCTG GATTTTAA      120
CCAAGCACTA TTATTTATAG TTGCGTTAAA ATAAATAGGG ATGGGTTTGA TAAGTCACCA      180
CTTGGTGCTT TAAATTCTGC CATCATCTTT TCTAGGAGTG TAAGATATAG AGATACACAT      240
AAGCAGAAAA TTTTAA CATGAGGATA CTCGAG                                     276

```

(2) INFORMATION FOR SEQ ID NO:500:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:500:

```

GAATTCGGCC TTCTGGCCTA GACCTGCCTC TGATATGTAC TTGGTTTTTA AAAACCCATT      60
TTGTTCTCTC TTGTTTCCTC TCTATTTTCTC CCTAGTATCA GAAGGCCAGG CGAGACTGCA      120
ACACTGCTCA TCACCCCGCG GCGTGATCCC TGCTCTTAGG TGCTGGGCAG AGGGGAAGGG      180
TGGTCAGGGT GAGGATGGTG AGGGAGGGCT GGTGAGGGGC TCAGAGGAAT ACTTGAACA      240
ACAGCAGTGT CTCGAG                                     256

```

(2) INFORMATION FOR SEQ ID NO:501:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 635 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:501:

```

GAATTCGGCC TTCATGGCCT AGTGGTTTTG TTGTTGTTGT CGGAGACAGG GCCTCGCTTG      60
GTCTCCCAGG CTAGAGTGCA GTGGCATGAT CACGACTCAC TGCAGTCTCG ACCTTCTGGG      120
CTCAAGTGAT CCTCCTGTGT CAGCCTCCCA CACAGCTGGG ACTACAGGCA CATGCCACCA      180
CATCCAGCTA ATTTAAAAAA CATTTTTTTT GTAGAAATAG GGTCTTACCA TGTTGCCCAG      240
GCTAGTCTCA AATTCCGGGG CTCAAGCAAT CCTCCACCT CACCTTCCCA AAGTGCTGGG      300
ATTACAGGCA TGAGTCACCA TACTTGGCCC GAGTGAGCCA AGATTGCACC ACTGCACTCC      360
AGCCTGGGCT ACAGAGCAAG ACACATATCTT AGATCCNNA AGGAAAAAAA AAAAAGAAGG      420
AGAAAGAACC AGAGAAACAT AAGGAAGAGT GAGAGGAAGA AAGAAAGATG CAATTGGGA      480
AGAAATGAAA AAGAAATGAA TAAAGAATAA AATAATGTAA CCGTCAATAA ATAGGACTTG      540
TGAATGGAGG CCTTTAGGCC AAAGGCTATG ATTAATTTC AAGTATGTTA CTGAAGTCCA      600
TAAACAAAGG ACTCAGATCT AAATGGGTAC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:502:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:502:

```

GAATTCGGCC TTCATGGCCT ACCCGTAGAA ATCCCCCTTT CTCTAATAGC GAGGCTCTAA      60
CCACACAGCC TACAATGCTG CGTCTCCCAT CTTAACTCTT TGCCTTTGCC ACCAACTGGC      120
CCTCTTCTTA CTTGATGAGT GTAACAAGAA AGGAGAGTCT TGCAGTGATT AAGGTCTCTC      180
TTTGGA CTCT CCCCTCTTAT GTACCTCTTT TAGTCATTTT GCTTCATAGC TGGTTCCTGC      240
TAGAAATGGG AAATGCCTAA GAAGATGACT TCCCAACTGC AAGTCACAAA GGAATGGAGG      300
CTCTAATTGA ATTTTCAAGC ATCTCCTGAG GATCAGAAAG TAATTTCTTC TCAAAGGGTA      360
CTTCCACTGA TGGAACAAA GTGGAAGGAA AGATGCTCAG GTACAGAGAA GGAATGTCTT      420
TGGTCCTCTT GCCATCTATA GGGGCGCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:503:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:503:

```

GAATTCGGCC TTCATGGCCT ACAAATTTGT CTTGACATAA GTAATTTGGG TATGCTGTAT      60
AAAGGCTTCT AAGAATTAAG AAACATGGCC CGGGTTGCAA ATTTTAATGC ATGACTACCT      120

```



```

TTTTTCTAT AGAATATAGC TTTTGTGAGA TTCTCAGCAG TGGCTCTGAT CCAGAAAACA      180
TTAAGAACCA CTGGTCATGA GTGGTGATTT TCAGCTTTT TGGTCTTAAC CCAGTTAGGT      240
GGGACAGAAG CTCCTTATCT CACCTATACC ATCCAGCATC CTCGAG                      286

```

(2) INFORMATION FOR SEQ ID NO:504:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:504:

```

GAATTCAGCC TTCATGGCCT AGAGGGGTTT AGGATTCAAA GCAAAGGGGA GACAGCTACT      60
AAGTAAACTA CAAAATAATT GCTAAACTGA AAATTGTATA AAGTGACTG GACAGATGAT      120
GTTCTTAATT CTTATCCATG AAATATTTTC TGCCTTCTTA GAGGAAATAG CACCTGACAC      180
AACACTAGCC ACATTGTAGG TGATCAATCA GCACATGTCT AAATAAATTA ATTAATAAAG      240
AATCAATTAG AAATTCCACT GAAAATTCTT CTTAAATATA ACCAACTTCA TTATGACAAG      300
CTATGAATAT AGAGCTTACA TACATGTTAT ATATCAATAT GTGAGTAGAT AAAGAATGAA      360
TGCCTTAAAT TGTGGATTT TTTATTGTTT TTGTTCTTGT TTTGGAGATG GGGTCTCACT      420
CGAG                                                                424

```

(2) INFORMATION FOR SEQ ID NO:505:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:505:

```

GAATTACTCA GTTTCAGGT TCTTCCTAGC TCGGGGCTTT TAAATTTTGA AATCTAAACA      60
TTCTTTCCCA CCATCCTTTT TGACTGTGGA CCTTGGTTTT CTCTTCTAAG TTTCTGTCCC      120
TCTGCTTCTT TACTTTTTTT CCTTTTGAAT TTCTATCTTT ATCTGTCTTT TGTTCACTTT      180
TTAATGCTAT ATATGGATCT CGAG                                          204

```

(2) INFORMATION FOR SEQ ID NO:506:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 218 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:506:

```

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGAGA TGTACAGTAA TAAGTATGCA      60
CAGAAATGTT AGATTATTTT TGAAGATGTG GAGAAACTAC TGTTATTTTT GCTTATATTC      120
TTCTCTAAAA ATTCATAAAA TGAATAACAG TTATTGGTTT TGCTATTCAA GATAATTATA      180
AAAATATCTA TTATAGCTAA TCTTCACATG AACTCGAG                          218

```

(2) INFORMATION FOR SEQ ID NO:507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:507:

```

GAAGTTTAAC ATTCAACTG TTGGTAAAT CTCCTGGTG CCACCTGTC GCACCCCTT      60
GTTATGAGGC ACAGTTAGTG GGTATTGAG AGGTTTGTT AGTGAAGCTC CTGCCACTGT      120
AGACCTAAAT GTTCTCTCC CTGTTGAAGT GACCTGCCTT CCTCTTAGT ACCTAACACA      180
GTTGGCAAAG AGCATGGCTA ACTCAAACCC TTTTCTTTGG GGGCAGGCTT CCCTTTCTCT      240
CTGGCAGGTA TATTAAAAA TTACAAAATA GTAAATTTGC CAAATTTTC TTGGTGTGTA      300
GCAAGGCATA AAGACTGAAA AATATCTTAT GAATTAGTTC ACTTCCTCG AG          352

```

(2) INFORMATION FOR SEQ ID NO:508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:508:

```

GAATTCGGCC TTCATGGCCT AAAATGATAC AGTGTGCAGA ACTGGACCCA GTAGGGAATG      60
ATAAAATGTA CAGATGTGCA GAACAGGACT TGGTAGGACT CAGCAGAGAA AACAGGAGGA      120
GAGATGAAAA TGATATGGTG TGCAGAACTG GACTCAGTAA GGTGCGGAAA GGGGAAGGAT      180
TCTGACAGAA TCCAGCACAA AAACAGAGAG GGTGCAGAAA AAGAGATTG GTCACCTAGA      240
CGTGTGGAGT TGGAGGAGCC TGTGGGAAAT CCAGGATCTC GAG          283

```

(2) INFORMATION FOR SEQ ID NO:509:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:509:

```

GAATTCGGCC TCATGGCCTA CTCTCCTTTC TTAACCTGTG TACTTGGGGG CACTTTTGAT      60
TTTGGTCCCA CATCATTGAG GAAGCTGGCC CAGAGTTCGT CCTCCTTCTT TTTCTGGCA      120
TCCTCTGATC CAATGCCTTT TTCCTGCTCT GCAGCGTCAT CTTCTCCTC ACTACTGCTT      180
CCCTCAGATT CTGAATTGGC ATCCTCCTCT TCCTCTTCTT CTAATGAGAG GCCACCTTGT      240
CTTCTCTTCC TGGCTGGAAT GCTCTGGGCC TTTCTTTTTT TCCCTTGGGT TTTCTGTGTC      300
TGCTCTTCAC CATTAGGCCA TGAAG          325

```

(2) INFORMATION FOR SEQ ID NO:510:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:510:

```
GAATTCGGCC TTCATGGCCT AGACAGGAGG TCATTGGGGA TTTTAGAAGG TTACACTGGA      60
TACATTTCCA TTAAGCTTCA CGATATCCCA CAGGTCCATT CTGTGTGAAA TGGTCTAAAA      120
ATTTCCTGTT CTCATGCTTC ATTTTCTTCT TTTAGTAATA TTCTAATTG TGTAATAATAG      180
TATTTCTTTT CATTATCTT AATTATGTTA TATTAAGATA TCATGTGTAT GCTTAAATTA      240
TACTTTTGGG CTTCAAATGA GTGACCCAC TCAGACTCGA G                          281
```

(2) INFORMATION FOR SEQ ID NO:511:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:511:

```
GAATTCGGCC TTCATGGCCT AATTCCTTG ACTCAAGACA GCTAACTTCA TTTTCAGAAC      60
TGTTTTAAAC CTTTGTGTGC TGGTTTATAA AATAATGTGT GTAATCCTTG TTGCTTTCCT      120
GATACCAGAC TGTTTCCCGT GGTGGTTAG AATATATTTT GTTTTGATGT TTATATTGGC      180
ATGTTTAGAT GTCAGGTTTA GTCTTCTGAA GATGAAGTTC AGCCATTTTG TATCAAACAG      240
CACGCTCGAG                                250
```

(2) INFORMATION FOR SEQ ID NO:512:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:512:

```
GAATTCGGCC TTCATGGCCT AATTGATTCT AATCTTTCCC AAACAGTGCT GTGGCAATGT      60
ATGAAAGTAA TAAAAATAAT CCTTTTCTG TTAAAAAATA AATTGCTGTT ACTTGCTGTT      120
TTGTTATGCT TTTGCTGGAG ATTTCCAC CCATCTTAAA GCAGCAACTT CAGGATGGG      180
GAATCAAGCA AAACCATGGT GAAGAGATTC ATTTAAAGAG GACAAGTCTC GAG          233
```

(2) INFORMATION FOR SEQ ID NO:513:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:513:

```

GAATTCGGCC TTCATGGCCT AGTCACCTTT TGTGGGAACT TCTCTCAGCG AAGCGGAGCA      60
TGCGAATTTG ACATCATGAT TGTCTGAAAA TTGGTAAGCC ACTATCCCAG AAAGAGCTCC      120
CTATGCCCGAG GGCTTGCAAT GCTAAGAGAA GGAGGCAGGA GAGAGACAGG GAGCGACACT      180
ACATTGGGTG GGGTGAGGAT ATGAGGTTCC TTGGACATCA TGGCCTCCAG TGAATATGTG      240
GGTGATGGCT TGGAACTTAA GCTTTTTTGC TAGTGCCCCA CAAAAGAGTA CCCTCCACAA      300
CCCATCTGTG GACCACAGCA GTGCCTCTCA ACAAACATGT GCCCCAAGGA GTCTCGAG      358

```

(2) INFORMATION FOR SEQ ID NO:514:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:514:

```

GAATTCGGCC TTCATGGCCT AGAATAGAGG AAAATAGCCG CCTGGTGGCT AGACAATTTA      60
GGGTAGAAAA ACACATTTAT ATGGTTCTTT GAATGTAACA GTGGTAAAGA ATATAGGTTT      120
AGTTGTTGCT GCTAAGTAGG GGGAAATGAC ATTTTATCT GGTATGTTTG AGAATAAAGT      180
AAATTTCAAA ATTTGAGATG ATCGAAGTTT TTATTATATA ACTTAAGTAT TATTATAATA      240
TGTTACATAT TTTATTCTTT AAAAATTGTA ATTCAGAGAG TGTAACAAAA TGTACTTCCT      300
CACTTTCTTG CTTTTTGTTC CCCAGAAGTA ACTCGAG                                337

```

(2) INFORMATION FOR SEQ ID NO:515:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:515:

```

GAAAAGATGG AAGAAAACCA CCATAGCACT GCAGAAGAAC TACAGGCTAC TCTACAAGAA      60
TTATCAGACC AGCAACAAAT GGTACAGGAA TTGACAGCTG AAAATGAGAA GCTGGTGGAT      120
GAAAAGACGA TTTTAGAGAC ATCCTTTCAT CAGCATCGAG AGAGGGCAGA GCAGCTAAGT      180
CAAGAAAATG AGAAGCTGAT GAATCTTTTA CAAGAGCGAG TAAAGAATGA AGAGCCCACC      240
ACTCAGGAAG GAAAAATTAT TGAAGTGGAG CAGAAGTGCA CAGGTATTCT TGAACAGGGC      300
CGCTTTGAAA GAGAGAAGCT ACTCAACATT CAGCAGCAGT TGACCTGTAG CTTGCGGAGA      360
CTCGAG                                366

```

(2) INFORMATION FOR SEQ ID NO:516:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:516:

```

GCGAGTGAGC CGGGGTAGCA TCACCTCACT CCAGCCTAGG TGATGACAGA GTTAGATTTT    60
GTCTCAAAAA AGAAAAAGAA AACAATTCCA GGATTATTAT TTCTACGTAA ATGTGACATA    120
TTATTCTAT  GATATTATTT CTTTGATCTC GTAGCCACAC TGTTCCCAAT AATGATTATG    180
AGAAAAAGTA CCCTCTGTTT GAAGGCAATC ATGGGGAAAA TATAATTAC  AAAGTATTTT    240
AAAATTAAAA TCCTGTGTAT TTCAAAAGAC GATGGTCCTA TTTTAAGAAA AATAACCTTG    300
CAATTCATTT GCTTTTTCAT TGGCTCGAG                                     329

```

(2) INFORMATION FOR SEQ ID NO:517:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:517:

```

GAATTCGGCC TTCATGGCCT AGTCCTTTCA AGTACACAGA GAAATTTTGC TTGAATTTCT    60
GGAGGAAGAG TCCAGGGTTC GGGAAAAGGG ACTGGGTGGT ATCTATCTGG GGCCCCAGAC    120
AGCGGCACTT CTTTCTCTG TGCTGGAATT CGGCGAACAA TCATATCATC TTTTCCAAA    180
TCCGGAAGTA CAAGTTCACC TTCTCTACAC TGTAATAATTA TATCTCGCTC TACAGAATCA    240
TCTTGCTCAG AGAACTTTCT AAAGTCTTCA AAAGCTCGGA GAACATATGG ATTTGCATGG    300
AAAGCCCCAG TCTTTCTGAC AAAGAAATCA TCATTCTCTA AGTCAGGATC CAGGGCTGCC    360
ATCTCGAG                                     368

```

(2) INFORMATION FOR SEQ ID NO:518:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:518:

```

GAATTCGGCC TTCATGGCCT ACGCTGAGAT CAAGATTCGG AGTTTGGGCT GCCTAATAGC    60
TGCAATGATA CTGTTGTCCT CACTCACCGT GCACCCCATC TTGAGGCTTA TCATCACCAT    120
GGAGATATCC TTCTTCAGCT TCTTCATCTT ACTGTACAGC TTGCCATTC ATAGATACAT    180
ACCCCTCATC CTGTGGCCCA TTTCTGACCT CTTCAACGAC CTGATTGCTT GTGCGTTCCT    240
TGTGGGAGCC GTGGTCTTTG CTGTGAGAAG TCGGCGATCC ATGAATCTCC ACTACTTACT    300
TGCTGTGATC CTTATTGGTG CGGCTGGAGT TTTTGCTTTT ATCGATGTGT GTCTTCAAAG    360
AAACCACTTC AGAGGCAAGA AGGCCAAAAA GCTCGAG                                     397

```

(2) INFORMATION FOR SEQ ID NO:519:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 640 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:519:

```

GAATTCGGCC TTCATGCCTA CTTTGGTAAC AGAAGAGAAG ACTGTGGAGC CAGCTACCGT      60
CTCAGAAGAA GCAAAGCCTG CATCTGAACC TGCTCCTGCC CCTGTGGAAC AGCTGGAACA      120
AGTAGACCTG CCCCAGGAG CAGACCCCGA TAAAGAAGCT GCCATGATGC CTGCGGGTGT      180
TGAGGAAGGT TCATCAGGTG ACCAGCCGCC TTATCTGGAT GCCAAGCCTC CAACTCCCGG      240
GGCCTCGTTT TCCCAGGCAG AGAGCAACGT AGATCCAGAG CCTGACAGTA CCCAGCCACT      300
TTCAAAACCA GCTCAGAAGT CTGAGGAAGC CAATGAGCCA AAGGCCGAAA AGCCAGACGC      360
CACTGCAGAT GCTGAGCCTG ATGCAAACCA GAAAGCCGAA GCTGCTCCTG AGTCTCAGCC      420
CCCAGCTTCT GAAGATTAG AGGTGATCC TCCAGTTGCT GCAAAGGATA AAAAGCCAAA      480
CAAAAGCAAG CGTTCAAAGA CCCCTGTTCA GGCAGCTGCA GTGAGTATCG TGGAGAAGCC      540
CGTCACAAGG AAGAGTGAGA GGATAGACCG GGAAGAACTC AAGCGGTCCA ATTCTCCTCG      600
GGGAGAAGCA CAGAAGCCTT TGAATTAAA GACACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:520:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:520:

```

GAATTCGGCC TTCATGGCCT AGCAAGAGAA AGAGAAGTGC AAACACTCCC ACGGCGAAGC      60
GCCCTCCGTG GACGCGGATC CCAAGTTACC CAGTAGCAAG GAGAAGCCCA CTCACTGCTC      120
CGAGTGCGGC AAAGCTTTCA GAACCTACCA CCAGCTGGTC TTGCACTCCA GGGTCCACAA      180
GAAGGACCGG AGGGCCGGCG CGGAGTCGCC CACCATGTCT GTGGACGGGA GGCAGCCGGG      240
GACGTGTTCT CCTGACCTCG CCGCCCTCT GGATGAAAAT GGAGCCGTGG ATCGAGGGGA      300
AGGTGTTCT GAAGACGGAT CTGAGGATGG GCTTCCCGAA GGAATCCATC TGGATAAAAA      360
TGATGATGGA GGAATAATAA AACATCTTAC ATCTCAAGA GAGTGTAGTT ATTGTGAAA      420
GTTTTCCGT TCAAATTATT ACCTCAATAT TCATCTCAGA ACGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:521:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 202 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:521:

```

GAATTCGGCC TTCATGGCCT ACCCGTTTCC TCTAGTTTCT TCCTGTAGTA CTCCTCTTTT      60
AGATCCTAAG TCTCTTACAA AAGCTTTGAA TACTGTGAAA ATGTTTACCA TTCCATTTC      120
TTTGTGTTGT TTTTAACT GCATTTTACC AGATGTTTGT ATGTTATCGC TTATGTTAAT      180
AGTAATTCCT GCGGCCTTCA TG

```

(2) INFORMATION FOR SEQ ID NO:522:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:522:

```

GAATTCGGCC TTCATGGCCT AAATTTAATG AAGCAAAATT CCATACATCA TTTTGAAAAT      60
AGTGTTCCTT TCCCTGATAG GCCTGTTCTG CATCATTTCTT TTAGCTTCCT TCTGCCCTGT      120
TTATCACTTG GTCCCACTTT TATATTTTTC CTCTTCGGTC CAGAATTTCT TATTTAGTTT      180
CTTGATTTT GCCTACTCCC TCCCTTCTCC ATGATTACAGC CTAGTCTTTC CGTCCTCTGT      240
GGACTTGGGT GTGCCTTCCT CTGGGCCACC TCGTCTTTTG CTGCTGTTAG CCCTCCCGCC      300
TGCGCACCTG CCACTTCACC CTCGCCTGTG GTCCACTTAC GTTCCACTCA GCCCGTCAG      360
TCCTGCTTTG TTCTTCTCCA CCGCCTTGGT CTCCCGTGTG TCTTATCTAG CTCTGGTTCC      420
TTCTCGTCTC CACATTTATT TTGTTTTCTT CCTGTGCTTG TTAGTCCTTG TGCACCTGGC      480
CCTTTTCTCG AG                                     492

```

(2) INFORMATION FOR SEQ ID NO:523:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:523:

```

GAATTCGGCC TTCATGCCTA GGAAATTTC AATTGTTGTC TCCCCCTTTG TGGGTCAGCA      60
GGTGGTCAAG ACAGGGGGCA GCAGTAAGAA GCTACAGCCC GCCAGCCTGC AGTCTCTGTG      120
GCTCCAGGAC ACCCAGGTCC ATGGAAAGAA ATTATTCCTT AGATTGTGATC TAGATGAAGA      180
AATGGGGCCC CCTGGCAGCA GCCCAACACC AGAGCCTCCA CAAAAGAAAG TGCAGAAGGA      240
AGGGGCTGCG GACCCAAAGC AGGTCGGGGA GCCCAGCGGG CAGAAGACCC TTGATGGATC      300
CTCACGGTCT GCAGAGCTCG TCCCCAGGG CGAGGATGAT TCTGAGTATT TGGAGAGAGA      360
CGCCCCTGCA GGAGATGCTG GGAGGTGGCT CGAG                                     394

```

(2) INFORMATION FOR SEQ ID NO:524:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 600 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:524:

```

CGATTGAATT CTAGACCTGA CCAAAGACCT TCCGTACAGA TTGACCGCAG AATGTCAGGG      60
AAAGTTAGGA GAAGAAGTTC TGAGAAGACT GACTACAGAT TGGCTGGCCT GGCTGACCCA      120
GGAACCTCTG AGCAGACTGA CCTCAGATTG TATGGCCTCG TTGACCACAA AACATCTGTA      180
AAGACTCACC ACCAAGTGTA CGGCCAAGCC ACTGAAGTAG CTGAACACCA GGCTATTGAC      240
CAAGCTCATA GTAATGCTGA TCAACCTCCA GTTGACAAATG CTCACTACAC TGAATCTGAC      300
CAGACTGACC ACTTAGCAGA CAGACAAGCT AATCATAAAG ACCAGCTGTC TTACTATGAA      360
ACACGTGGCC AGTCTGAAGA CAGAATATTT CCCCAGTTAG GCAACAGCAA AGAGGACAAA      420
GAGGCTGACT ACAGAGTACA ACCCTGCAAA TTTGAGGATA GCCAAGTAGA CCTCAATTCC      480
AAGCCTTCAG TTGAAATGGA AACTCAGAA GCAACCACTA TCCCACCTTA CAACCCAGTT      540
GATGCCAGAT TCACCAAGTA ATTCCAAGCA AAAGACCAAG CTCTTTTCCC AAGACTCGAG      600

```

(2) INFORMATION FOR SEQ ID NO:525:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:525:

GAATTCGGCC	TTCATGGCCT	ACTTTCTTCT	GCTGGCTTCC	ATCTTGCCAC	ACTTTCTTGC	60
TCTTCCTTCT	AACTGAAAGA	CTACTTCTCC	ATCCCCCTCG	CAGGCTCTTT	TGCTCCACCT	120
GATATTTAAA	TGTTGGAATG	CCTAGAGTTG	TTCTGACCCT	TCTTTATCTA	CCCCGATTTC	180
CTCAGTGATC	TTATGCAGAG	GTCTCCCAA	GTTTACATGG	CTATCCTTGA	CCTCCTTCTC	240
GAAGTCAGC	TGGTGTGAGC	TGCCGTCACT	TGGATGTTTA	ATCAGCAACT	CAAGGTTTAC	300
GTGATGATTA	GACCGCAGTT	ACCCCCAGAC	TTCTTTATCC	CTTAGTTTTT	CCCATCTCAT	360
TAAGTTCACT	TCCATTCACT	TTCTTGATGA	AGCCAAGTAT	TTCAGAACTA	GCCTTGTTTC	420
TTCTTTTCA	CTTTCCCCCA	TATCAATTCC	AGACTACCCA	CTCGAG		466

(2) INFORMATION FOR SEQ ID NO:526:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 559 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:526:

GAATTCGGCC	TTCATGGCCT	ACATTGTAGA	AGAGATCACA	GAAACCACAA	AAGGTTTTCT	60
GAAGTATATG	GATAATCAAT	CATTTGCAAC	TGAAAGTCAG	GAAGGAGTTG	GTTTGGGACA	120
TTCACCTTCA	TCCTATGTGA	ATACTAAGGA	AATGCTAACC	ACCAATCCAA	AGACTGAGAA	180
ATTTGAAGCA	GACACAGACC	ACAGGACAAC	TTCTTTTCTC	GGTGCTGAGT	CCACAGCAGG	240
CAGTGAGCCT	GGAAGCCTCA	CCCCTGATAA	GGAGAAGCCT	TCGCAGATGA	CAGCTGATAA	300
CACCCAGGCT	GCTGCCACCA	AGCAACCACT	CGAAACTTCC	GAGTACACCC	TGAGTGTTGA	360
GCCAGAAACT	GATAGTCTGC	TGGGAGCCCC	AGAAGTCACA	GTGAGTGTCA	GCACAGCTGT	420
TCCAGCTGCC	TCTGCCTTAA	GTGATGAGTG	GGATGACACC	AAATTAGAGA	GTGTAAGCCG	480
GATAAGGACC	CCCAAGCTTG	GAGACAATGA	AGAGACTCAG	GTGAGAACGG	AGATGTCTCA	540
GACAGCACAA	GGCCTCGAG					559

(2) INFORMATION FOR SEQ ID NO:527:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 318 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:527:

GAATTCGGCC	TTCATGGCCT	ACGCAGTGGT	TCAATTTTCT	TCGAAACGGT	GTGGTCCCTG	60
CAAAAGGATG	TTTCCTGTTT	TCCATGAGCT	GGCTGAAACT	TGTCACATCA	AAACAATACC	120
CACATTTTCA	ATGTTCAAGA	AAAGCCAGAA	GGTAACCTTA	TTCTCAAGAA	TCAAAAGAAT	180
AATTTGCTGT	TATAGAAGTG	GATTCATGAG	CAACCTGATT	TTTGAGTTTT	GTGGAGCCGA	240
TGCTAAAAAA	TTGGAAGCCA	AGACTCAAGA	ATTAATGTAA	GCTGATCTCC	AAGGCAAAAT	300
ACACTTGTGC	CGCTCGAG					318

(2) INFORMATION FOR SEQ ID NO:528:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:528:

```

GGCACAGACT TACCGGACAC ACAGGTCATG GGACACAGAG TCATGGGGCA CACAGGTTCA    60
CAGGGCACAC AGGCTCACGG GACACAGAGT CATGGGACAC ACAGGCTCAC AGGGCACACA    120
GGCTCACAGG ACACACAGGT TCATGGGGCA CAGAGTCATG GGGCACAGAC TCACAGACTC    180
ACAGGTCATA GACGCTCATG GGGCGCAGGC TCACAGGGCA CACAGACTCA GGGCACACAG    240
GCTCATGGGG CACAGAGTCA TGGGGCAGGG CTCGAG                                276

```

(2) INFORMATION FOR SEQ ID NO:529:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:529:

```

GAATTCGGCC TTCATGGCCT ATTCTGTTCT TAAATTGTA ATGAAAGTTT GGCATTTTAA    60
AAACTTTTAG GTGATTAGG AGTATAATTT TAAGCAGATT TTAGAGTAC GAGTGTCCAC    120
ATATTAACT AAACATTCAA AAATTAGTTA AAATCAATGA ACTTGGGAAG GATCCTCGAG    180

```

(2) INFORMATION FOR SEQ ID NO:530:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:530:

```

GGGGACAGAA GATGTGCTCC AGGGTCCCTC TGCTGCTGCC GCTGCTCCTG CTA CTGGCCC    60
TGGGGCCTGG GGTGCAGGGC TGCCCATCCG GCTGCCAGTG CAGCCAGCCA CAGACAGTCT    120
TCTGCACTGC CCGCCAGGGG ACCACGGTGC CCCGAGACGT GCCACCCGAC ACGGTGGGGC    180
TGTACGTCTT TGAGAACGGC ATCACCATGC TCGACGCAGG CAGCTTTGCC GGCCTGCCGG    240
GCCTGCAGCT CCTGGACCTG TCACAGAACC AGATCGCCAG CCTGCCCAGC GGGGTCTTCC    300
AGCCACTCGC CAACCTCAGC AACCTGGACC TGACGGCCAA CAGGCTGCAT GAAATCACCA    360
ACGAGACCCA GGCCCTTCAG CACCGTTCAC AGTATTTTGA AGGTGTTGTG AAGTGCAATA    420
AGCTGGAAAT ACTGGAGACC ATCGTGGACA GAATAGTAAG AGCCCTCGAG                470

```

(2) INFORMATION FOR SEQ ID NO:531:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:531:

GAATTCGGCC	TTCATGGCCT	AGAAAATTCC	AGAAAGGATA	TTTAAGAAAA	TACAATAAAC	60
TATTGGAAAG	TACTCCCCTA	ACCTCTTTTC	TGCATCATCT	GTAGATACTA	GCTATCTAGG	120
TGGAGTTGAA	AGAGTTAAGA	ATGTCGATTA	AAATCACTCT	CAGTGCTTCN	TACTATTAAG	180
CAGTAAAAAC	TGTTCTCTAT	TAGACTTTAG	AAATAAATGT	ACCTGATGTA	CCTGATGCTA	240
TGGTCAGGTT	ATACTCCTCC	TCCCCCAGCT	ATCTATATGG	AATTGCTTAC	CAAAGGATAG	300
TGCGATGTTT	CAGGAGGCTG	GAGGAAGGGG	GGTTCAGTG	GAGAGGGACA	GCCCCTGAG	360
AAGTCAAACA	TTTCAAAGTT	TGGATTGTAT	CAAGTGGCAT	GTGCTGTGAC	CATTTATAAT	420
GTTAGTAGAA	ATTTTACAAT	AGGTGCTTAT	TCTCAAAGCA	GGAATTGGTG	GCAGATTTTA	480
CAAAAGATGT	ATCCTTCCAA	TTTGAATCT	TCTCTTTGAC	AATTCCTAGA	TAAAAAGATG	540
GCCTTTGCTC	GAG					553

(2) INFORMATION FOR SEQ ID NO:532:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 843 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:532:

GAATTCGGCC	AGAGAGGCCT	ACTTCTCTTA	GTGATTTCAT	GTTTCAACCA	GTACATTGTG	60
GTGAATACTG	AAATATCTTG	TTTAATTCAG	ATAATTAAAA	TGGTGGCAAA	GGAAGCTGTT	120
TAGCCAGAGC	CCTTCTTGAC	TTTGAGGAAC	AGTGGTAGTA	TAAGACTTGA	AGACAGACGT	180
GTAAAAAGTA	CTACTCACTG	GTAGGCTCAG	GTCTGGTTGA	TTGACTGATT	CTTGAGACGG	240
AATGTCGCTC	TGTCGCCTAG	GCAGGAGTGC	AGTGGCCCAG	TCTCGGCTCA	CTGCAGCCTC	300
CGTCTCCGGG	TCCAAGCGAT	TCTCCTGCCT	CAGCCTCCCG	AGTAGCTGGG	ACTACAGGCG	360
CCCGCCACCA	CACCGGGCTA	ATTTTGTAT	TTTTAGTAGA	GACGGAGTTT	CACATATTG	420
GTCTCGAACT	CCTGACCTCA	GGTGATCCAC	TCGCCTGGCC	CACCCAAAGT	GCTGGGATTA	480
CAGGGATGAG	CCCCTGCGCC	TGGCCTCGGT	TGAATTATT	AAACAACTTT	TGTGGGCAGC	540
AAGCTGTACG	AGGTAACTA	TGTGATGAGA	AGACTTAGAA	ATGGAGAAAA	GTTTTATCAG	600
TTCTACATAG	GACTTAGTTT	GGGAGTTTCT	GGAAACTACG	TTGGAAATCA	GTAGTTGCAC	660
ACTAGCTGAA	TTCAGCTGTG	TAATTACAG	TGATTTGTTA	TTTACCAAAT	AAGTAGAAGA	720
GGGAATTAAG	AAGCTAAAAT	CTCTGGGTAC	TTGTTTGATA	TGAATTTGTT	AATTGTTTAT	780
ACTCAGGTAA	TAAGTGTTAC	CTCAGTCATA	GCATTTAATA	TTTTATCTGA	CTGTCCTCTC	840
GAG						843

(2) INFORMATION FOR SEQ ID NO:533:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 525 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:533:

```

GAATTCGGCC AAAGAGGCCT ACATCCAGAA ATTTAGGGAC TCAGCCCTGG TCAGGGTGGC      60
AAAGGGTCTG TTTGTCTTTC CCCATTAGAC AGAGGTCTTG TCCTGCTACC CTAATTGTAA      120
AGGGGTGCCT GGAAGGGGT GGTAGGGACA TGGTGCGGT GGAGACTCCG GCCCCACTTC      180
TCCAGGCTTT GCTGACAGG GCCTGCTTTT AATTTTATT TTTATTCCAT GACTTTTAA      240
AAAAGAATCC CGTAACTTCT TTTTCATAAC TTTTTTGTA ACTTTTCATA ATACTGTTTT      300
CTACTTTGTT CCCACAAGTT TTTTGCCAC AACGTTTTA CATTTTAT CCCATAACTT      360
TTTCACCCCA TAACTTTTT AAATAAAGTT ATTTAATAAA ATAACTTTT ATAAAACTT      420
AATAAAAGTT TTTTAATTAA CCCATAACTT TTTATTTTG GTTTTAAATA AACACTTGCA      480
TAGTTATATT ACACTTTGT AAAAATGAAA CACATTATCT CAGGC                      525

```

(2) INFORMATION FOR SEQ ID NO:534:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:534:

```

GAATTCGGCC AAAGAGGCCT AGAAAACCCT TGAAGACATG TTGAAAATAC ATACTCCTGT      60
TAGCCAAGAA GAAAGATTGA TTTTCTTAGA CTCCATTAAG TCCAAATCCA AAGACTCTGT      120
GTGGGAAAAA GAAATAGAAA TACTTATAGA GGAAAATGAG GACCTCAAAC AACATGTAT      180
TCAGCTAAAT GAAGAGATTG AAAAGCAAAG GAACACTTTT TCATTGCTG AAAAAAACTT      240
TGAAGTTAAC TATCAAGAGT TACAAGAG                                     268

```

(2) INFORMATION FOR SEQ ID NO:535:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:535:

```

GGCTTGCAAC TCGGCGATCC CCGACTCCCT TCTTTATGGC GTCGCTCCTG TGCTGTGGGC      60
CGAAGCTGGC CGCCTGCGGC ATCGTCCTCA GCGCCTGGGG AGTGATCATG TTGATAATGC      120
TCGGAATATT TTTCAATGTC CATTCCGCTG TGTGATTGA GGACGTTCCC TTCACGGAGA      180
AAGATTTTGA GAATGGCCCC CAGAACATAG ACATTCCTCT CGAG                      224

```

(2) INFORMATION FOR SEQ ID NO:536:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:536:

```

GAATTCGGCC TTCATGGCCT ACCACTCTGG CCCACGCTC ACTGGCCTAG GGACACATGG      60
GGGTGGGGAT TGTTGGCCT TCCTGGCTTA GGTCTCTGGA AGAGAGAAGA ACCCCATGGG      120

```

GCAGACCCAG GCCACGGGCA GTACATGCCT CCCACACTAC TGACACCGCC AGTGTCTTCT	180
GTGAAGCCAC CTTTGAGCAA CGGAAAGGAA GGGGGATGGG CAAGATCAGT GCAAGGTTGG	240
CCAAAAGCCT GGGGCTGGCC TTCTGCTGGC ATGAGAGGGC CAGGCCGCC CCAGTCCTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:537:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 350 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:537:

GAATTCGGCC TTCATGGCCT AGAACAAAAT CTGAAATTCA GAAATAAACA ACAGTTGGAA	60
AATATTTTCC ATTTTTCCTT CTATTAAATA TGATAATTTC AGGTGCAAAG AGTGTCTTCT	120
TTTTTTTTTT TTCTCCACA GTGCTTTTCA CGGTGGGGAC TAATGGATAT AGAGGGTGGG	180
AGGCCAGAAT AACCAAGTAC CTGGAAGTGA ATCTTTGTGG AGATAATGAA ATAATTTTAT	240
TCGAAAGGTG CAAAAGGAAG TCTTCCATCA CTAGCTCAGC TGTATGGTC CTTGAACTGC	300
CCTTGCCCGT CTGTCTTTT ATTAATCCTT TTTACCTGTC GAGTCTCGAG	350

(2) INFORMATION FOR SEQ ID NO:538:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 344 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:538:

GAATTCGGCC TTCATGGCCT AGAGTTGCAC AGATGTCTTT TGTTAGCTTT GGTGGCGGAG	60
TCATCCTCAC AGACCGTTAC TCAGATAATT AAGTGCCTTG CAAATTTAGT ATCAAATGCA	120
CCTTATGATC GTCTAAAACT CAGCCTGCTG ACCAAAGTCT GGAACCATG AAAGCCTTAT	180
ATTGCCCACA AAGATGTTAA TGTTCTGTG TCAAGTCTCA CACTCTTGGG AGCTATAGTG	240
TCCACCCACG CACCTTTACC TGAAGTCCAA CTACTTCTGC AACAGCCATG TTCTTCTGGA	300
CTCGGTAATA GCAATTCAGC AACCCCTCAC CTCAGCCCCT CGAG	344

(2) INFORMATION FOR SEQ ID NO:539:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 343 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:539:

GAATTCGGCC TTCATGGCCT ACAACTCCAT TAAACCACCA CCAGTCCCC AAGCCACCCC	60
TTCAGCCATG AAGTTCCTGC TCCTGGTCTT GGCAGCCCTC GGATTCCTGA CCCAGGTGAT	120
CCCAGCCAGT GCAGGTGGGT CAAATGTGT GAGTAACACC CCAGGATACT GCAGGACATG	180
TTGCCACTGG GGGGAGACAG CATTGTTTAT GTGCAACGCT TCCAGAAAT GCTGCATCAG	240

CTACTCCTTC CTGCCGAAGC CTGACCTACC ACAGCTCATC GGTAACCACT GGCAATCAAG 300
GAGAAGAAAC ACACAAAGGA AAGACAAGAA GCAACCCCTC GAG 343

(2) INFORMATION FOR SEQ ID NO:540:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:540:

GCGATTGAAT TCTGAAGACC TCTCAGCCTC TTATGACCAC TCCTGGCACC CTGTCAAGCA 60
CAGCATCTCT GGTCACTGGC CCTATAGCCG TACAGACTAC AGCTGGAAAA CAGCTCTCGC 120
TGACCCATCC TGAAATACTA GTTCCTCAAA TCTCAACAGA AGGTGGCATC AGCACAGAAA 180
GGAACCGAGT GATTGTGGAT GCTACCACTG GATTGATCCC TTTGACCACT GTACCCACAA 240
ATCTCGAG 248

(2) INFORMATION FOR SEQ ID NO:541:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:541:

GAATTGCCT TCATGGCCTA GATTGTCTTT ATAGGAAATG TCTTTAGCAA AATACTACGG 60
GTTCTATAAA ACCCATTAAC GGGTTATCAG TGTCTAGGAC ATAAATGGCT TCTGGTAAGA 120
AAATTAAGGT CTA CTCTCCC TAAATACTAT CATAATTACA AAGGTTAAGA AAAAAGAAGT 180
AGAGTAAAC ATGTGTCCCT TAAAAATCAA ACATGAGTGG TCACAAGGTC CTAAGAAGCA 240
GAGAATGAGA ACTCCAGTTG CTGTTTATC TCTCAGGCTG AGCATGGTTG GTTACAATGA 300
GGGGTAGCAG GAAGAGCACA GCCTTGGACT CCAGTCCAAG GAACTCCAGT CTCTCCTGCA 360
ATTTCCCACT GTTTGACCTT GGGCCACTTA CTGTTCCCTT CTCAGCCTCC ATTTTCATAT 420
CTAAACCTC GAG 433

(2) INFORMATION FOR SEQ ID NO:542:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:542:

GAATTCGGCC TTCATGGCCT AGACACGGGA CATAAAACT TTTAATGAAG GAGGACACAG 60
CTCAGAGCCC TTCCACATGC GGCCCAACCC TGCCCCACGG AGACCGGCCA TGGCAACCGC 120
TCAATCAGAA GGTGTTCTTG ATGCGGCCGG CCACCAGCCT AAGGATGTCC CCGATCTTCT 180
TCTGCCAGTT GCGCATGTCC TTGGACACGG CGCACCACAG CTCCCATGC CGAGGCTCTG 240
CACTCTCACA GCGCTTCCTC ACCTCCTCCT GCTGCTCCTC AGTGCCATGC TGCAGCTCAA 300

```

ACTTGTAGAA GAAGGCCAG GCATCCCCCA GGTCCGAGTC AATCTTCACA GTGCGGTGGA      360
ACCACTCCCT GGCCTTGGTG ATCTTCCGCT GACTCCAAAA CAGCTTGGCC ACGGCCAGGA      420
GCACATGGGG GTCATGCTCA CACTTCTTCA GGGCATCCAC GCTCTTGGTC CTCCTCTGGG      480
GCCTTGCTC GAG                                                                493

```

(2) INFORMATION FOR SEQ ID NO:543:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:543:

```

GAATTCGGCC TTCATGGCCT AGTCAGGGAG AAGGGAAGGT GAGAAGGGGG GGAAAAAAGA      60
AGCAAAAAGC CCAAGAAAAA AAACATTTTA TATTCATCTG TATAAACATA TCCGCTAAGG      120
CAAACGCAAT CCGGGTCCGA GGCTGCTGCG CTGGGCTCGG TGCCTCCTAA TTTCTGCAGA      180
TTCTAAGGCC AAAAATAAAA ACCTCTGCAA GTCCGCGTAG CTTCCAGGAC TCCTGGGCAT      240
TTTACTAAAA TAAAGAGTTA TCGAGTTTAA AAAGCAGTGA CGTCGTTATG ACACACACTG      300
AAAGTTGCAT AACTGTGGCC TCGAG                                                                325

```

(2) INFORMATION FOR SEQ ID NO:544:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:544:

```

GAATTCGGCC AAAGAGGCCT AAGAATTCCT TATGAAAGTG ATGCTTGAGT CAAAATATGA      60
TGGATGAAGA GAGTTTAAAT AGATTACATA GAATTTTAA TAATGTCGAT TGGTTATATA      120
CTGGGCACTG ATAGCTGATT TTTCTTTGGG GAAAGGTATG TCAGCCTAGT CATTCAGATT      180
CCTTTATTTT TTAAATGTT TTTTCATTT TGCTTTGCA TTGCATTCAT TTGCTGAAGA      240
GCTGGCTTGT ACTTTGGCAG GTGTCATACT TGGTTATTCT CCTTAGGATA TTGGCCCAAC      300
AATCTGGGAT TTGTGAAAGG CGCTTCGCTT TTCAGACCTG GGCGTCTGTA TCATGACTAT      360
CATAAATTTA GGATTAAGAC ACCTAGCCTC CTACCAGGAT GAATGAGGTG TCCATGTGAC      420
CTGCTGTGCC CTGGAATTTT ATACATCTTT CTCTCATAGC ACACGGACTC GAG                                                                473

```

(2) INFORMATION FOR SEQ ID NO:545:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:545:

```

GAATTCGGCC AAAGAGGCCT AGTCGAGAAG GAAGAGGGAA GAAGAAAAAC TATAAAAGTG      60
TGCTAAATGT TTTATTTTCT CTGGAAGAAT AGTTATATTC TACTCTTTGT GGCTCTCGAG      120

```

(2) INFORMATION FOR SEQ ID NO:546:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:546:

```

GCTAGACCTG CCCCCTTAGA AATGGAAAAA GCATGCAAGA GAGATGTTAA AGGAGACTAT      60
TGGAGCAACT GTGTCCACAC CCTCTGTGAT AGAAATGGAA AAAATATCCC CAGAAGATCG      120
TGGTGAGAAT ATTGGGAAAC ACAAAGTGTT ACCCGCAGTG GTAGACATTG AGAAAATACA      180
TGGAACAGGA CTAGAATTGA CCACTAAACA AGGGGAGGCC ATGCTTCCTG CATTGAAAG      240
TAAACACCA CAAGAGTATG CTGAAGGGAG TGTGAAGAA ACAATGGAAA ATACTTACCA      300
AAAGGATGCT GAAGGGGATA TTGAAAGGC TGAAGTGATG CCTGTGAGGT TAGAAATGGA      360
AAATACTTAC CCAAAGGATA CTGAAAGAGA CGGTGGCAAA ACTGAGGTGA TGCCCTTGC      420
ATTAGAGGTA GTAATACTT ACCAAAAAAA TGCCAAAGGT TTTACCGGGA ACAATCTCGA      480
G

```

(2) INFORMATION FOR SEQ ID NO:547:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:547:

```

GAATTGGGCC AAAGAGGCCT AGAAACCTGA GGCTGCTGCC CTTTATCTGC CTTACGGTA      60
CTGTCCCCTT CCCCAGCTC CTCCCTGACC CCATGGGCCA GGCCTCAGAC CTTCCAGCTA      120
ACCGCTTCCC ATGAGCCACT ACTCTGATGT CAGCCTATAA CCAAGGAGC TGGGGGGTCC      180
AGGCCTGGTG ACCAACCTTT CTCAGCCAC TCAATCAGGG TGCTCCCCAC CTGCAGGCAG      240
GAGGCAACAC CCTATCTGCT ACCATCAGCC CCTCCAGAG CCCATCTGCC CCGCCAGCC      300
CTGCCCTGCC CAGCCATACC CTGCTCTGCC CCATCTGGGG GTGCCCTGCT CAGGGATGGG      360
CTGGCAGGGC TGTACCCAGC CTCCCTGGTA AGCAAAGAGC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:548:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:548:

```

GCGATTGAAT TCTAGACCTG CCTCCCTGCT TTCTAATAAA TCTGACTAAC CTTAGACATT      60
TTGTATCTTA CTAAGAACAT CCCTTCAATA TCTACTTCAT TATCCCATGC CATTTCCTCA      120
CTGTCTCAAC ACGAATCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:549:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:549:

GAATTCGGCC	TTCATGGCCT	ACTATGGTAT	TGCTAAACAA	GGGTGGGAGG	AGAGAGAGGT	60
AATCAGGGAG	GACTTCCCAC	AGGAGGTGGC	ATCTGCAGAT	GTCTCAAAAA	AGAAAAGAAT	120
TAGCCTGGCA	AGAGGTGAGG	ATTGTGTAGA	GGTCACTCAC	TTTCCTTG TG	GGTGGAGGAA	180
ACCATTCCAG	GAGCTGTAGG	AAGCTTGGTG	CTGGTGAAGG	AGGCAGGAGA	GGAGAGAAGA	240
GGAGATGACC	TTAGAAATCA	CATCCAAGAG	CCTCTGATCC	CAGGAGGCAG	CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:550:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:550:

GCAGGAGAGA	AAATTGAGGC	TTAGGTTAAG	AACTTACCC	AAAGTCAAAC	AATTTAATTG	60
GTTTGGGAAG	ACCAGGAAGA	CTTTAAGTTC	CTAAGATCGT	TTGAGATTCT	GCATCAGGGA	120
ACACTTGACA	GCAGGTTTAT	ACAAAGACAG	ATTTGGTATC	TTTGGAGGGA	ATGAGTTTCC	180
AGTCATTGCA	GGTGGTCCAG	CAGAGAGGGC	CACCTCCTT	TTTTCTTTC	TTTACTCCCT	240
TTTTGATTCT	CGAG					254

(2) INFORMATION FOR SEQ ID NO:551:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:551:

AGGCCATGAA	GGCCCTTTC	ATTCTTTTT	GTTCCATCAC	TCTTCTCTCA	ACCTGTGTTT	60
CTTTTITTTAC	TGAGGAGTTA	GTCCCATTA	GTTCTGTAT	CACATTTTCA	TTTGCACGAC	120
ATTACTCGCA	GGTGGTGGG	AGCCTGGGCT	TTTGGGGAAC	CAGGCTGCTC	TGGTCCCCAG	180
CATTGCCTCC	TCCTAGCCCC	TCTAGTCCAG	TTTGCCTCCC	TTACCCCTCAT	TTTCCAAACC	240
TCTTGTAACC	TCCTCTCCCT	CCCCAGCTG	GCCTCGAG			278

(2) INFORMATION FOR SEQ ID NO:552:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:552:

GAATTCGGCC	TTCATGGCCT	ATGCACTTCT	TCTTTCTCTC	CTCCTTTTGC	TGGGTGCTTA	60
CCGAGGCCTG	GCACTCCTAC	CTGGCTGTCA	TTGGGCGGAT	GCGCACCCGC	CTCGTTCGCA	120
AGCGCTTCCT	CTGCCTGGGC	TGGGGTCTGC	CTGCCCTGGT	GGTGGCCGTG	TCTGTTGGCT	180
TTACCCGAAC	GAAAGGATAC	GGTACATCCA	GCTACTGCTG	GCTCTCCCTG	GAGGGCGGCC	240
TGCTCTACGC	CTTTGTGGGC	CCTGCAGCCG	TCATTGTCCT	GGTGAACATG	CTCATCGGAA	300
TCATCGTCTT	CAGCAGCTCG	AG				322

(2) INFORMATION FOR SEQ ID NO:553:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:553:

GCCAAAATCA	AGCAAAGTAT	GAAGAAAGAT	AAAGAAGGGG	AAGAAAAAGG	GAAGCGAAGA	60
GGATTCCCCA	GCATCCTGGG	ACCCCCACGG	AGACCAANCC	GTCTATGACAA	CAGTGCAATT	120
GGCAGAGCCA	TGGAATACAA	GAAGGCGCGC	CACCCTAAGC	ACTTATCCAC	ACCCTCATCT	180
GTGAGTCCTG	AACCTCAGGA	CTCTGCCAAG	TTGCGCCAGA	GTGGGTTAGC	AAATGAAGGA	240
ACAGACGCTG	GATACCTGCC	TGCCAATTCC	ATGTCTTCTG	TAGCTTCAGG	GGCCTCTTTT	300
TCCAGGAAG	GAGGGAAGA	GAATGATACA	GGATCAAANC	AAGTTGGAGA	AACATCAGCA	360
CCTGGAGACA	CCTTAGATGT	CACCCTCGAG				390

(2) INFORMATION FOR SEQ ID NO:554:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:554:

GACGGCTACA	CCATGGGCGG	GCTGCTGCGG	GCCGCCCGGC	TGCCGCCGCT	GCTTTCGCGG	60
CTGCTGCTTC	TGCTGGTTGG	GGGAGCGTTC	CTGGGTGCCT	GTGTGGCTGG	GTCTGATGAG	120
CCTGGCCCGA	AGGGCCTCAC	CTCCACCTCC	CTGCTAGACC	TCCTGCTGCC	CACTGGCTTG	180
GAGCCACTGG	ACTCAGAGGA	GCCTAGTGAG	ACCATGGGCC	TGGGAGCTGG	GCTGGGAGCC	240
CCTGGCTCAG	GCTTCCCCAG	CGAAGAGAAT	GAAGAGTCTC	GGATTCTGCA	GCCACCAGCA	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:555:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:555:

```

GAATTCGGCC TTCATGGCCT ACCCTCTCAC GCCACCCCGG CCCCACCCGG GCTGCAGGTG      60
CTGCTGATGC GCTGGGATCT GATTGAGGAT AAAAAGGAAG GAGAGATGAC CCCTACCCCC      120
TCATCCCCCA GTTTTGAAAA GGTCTAAGCA AGTGAGTCTG GTGGAGGAGC TGAGGGGAGG      180
AGCCATGGAA GGTGCCAGAA GGAAGGTTGG CGGGGGCACG TGTGGGCCGT GGCTTGGGCT      240
GGTCAGAGTG GCGTGAGCTG CCCGGCGCCT GCCCTGCCCA AGTGACCAGG GAAGTGTGTG      300
TGTGTCCATG TGTATGCGTG GCTCGAG                                     327

```

(2) INFORMATION FOR SEQ ID NO:556:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:556:

```

GAATTCGGCC TTCATGGCCT AGAGAAGGAG CCAGCTGGGG CCGAATCCAT CCGCTTGAAC      60
ACCAAGAAG ACAAAATGG TGTCCCGAC TTAGTGGCCC TGCTGGCTGT GAGAGACACC      120
CCGGACGAGG AGCCGGTGGG CAGCGACACT TCGGAGAGCG ACTCGCAGGA AAGTGGGGAC      180
CAAGAAACAG AGGAGTTGGA TAATCTGAG TTCGTGGCCA TTGTGGCCTA TACCGACCCG      240
TCGGACCCCT GGGCCCGGAA GGAGAACTCG AG                                     272

```

(2) INFORMATION FOR SEQ ID NO:557:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:557:

```

GAATTCGGCC TTCATGGCCT ATTCCGATC TATGTATCTG TACTCATACA GCCTCATCGG      60
GCTAAACAGC CTTCCTTTCA GAACAGTAGA TCACTCAACT GGGTTTTCAG GTGACTGTTT      120
ACCTTTCAAG GCTGGCTTTA TAGGTCTTGC CTCACTGTAT CCAGCAATCC AAACCTTTACC      180
CTATCCCACT CAGGACTGCA CACCTCATAT TGAAAGACAT ACCTTAGAAC CAGACTCCCC      240
AAACCTTACA AATATCCAC CTTGACTCC CGTTCTCGAG                                     280

```

(2) INFORMATION FOR SEQ ID NO:558:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:558:

```

GCAATGGTCT CCAGGATGGT CTCTACCATG CTATCTGGCC TACTGTTTTG GCTGGCATCT      60

```

```

GGATGGACTC CAGCATTGTC TTACAGCCCC CGGACCCCTG ACCGGGTCTC AGAAGCAGAT      120
ATCCAGAGGC TGCTTCATGG TGTATGGAG CAATTGGGCA TGGCCAGGCC CCGAGTGGAA      180
TATCCAGCTC ACCAGGCCAT GAATCTTGTG GGCCCCCAGA GCATTGAAGG TGGAGCTCAT      240
GAAGGACTTC AGCATTGGG TCCTTTTGGC AACATCCCCA ACATCGTGGC AGAGTTGACT      300
GGAGACAACA TTCCTAAGGA CTTTAGTGAG GATCAGGGGT ACCCAGACCC TCCAAATCCC      360
TGTCTGTGG GAAAAACAGC AGATGATGGA TGTCTAGAAA ACACCCCTGA CACTGCAGAG      420
TTCAGTCGAG AGTTCAGTT GCACCAGCAT CTCCTTGATC CGGAAACACT CGAG          474

```

(2) INFORMATION FOR SEQ ID NO:559:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:559:

```

GAATTCGGCC TTCATGGCCT AATTTTTTGG TTGTGTTTC CTTTTGTAT TTTACTGATA      60
TCACCAGGAT AGTTTACTCT CCTTCTAGCT TTCTGCTTAC CGCACACTGG ATAACACACA      120
CATACACACC CACAAAATG CTCATGAACC CAATCCGGAG AAGGTTCCAG CAGGTCCCCC      180
ACCTCCCCCT CCTCCTCCTA CTCTCCTCT TGACAGCGAG GACAGGAGGG GGACAAGGGG      240
ACACCTGGGC AGACCCGCCG GCTCTCCCC CACCCACCC CGTCCTCGAG          290

```

(2) INFORMATION FOR SEQ ID NO:560:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:560:

```

GTGTATGTGG GGGGTAAGTG TGTGTGTGTG CGTGTGCGTG TATGTGCACG TGTGTGTGT      60
GTGCGCCTGC ACACGGAGAG CCCACTCATA CGTAGCAGAA AATCAAATGG CCCCAAATCA      120
GAAACATGGC GCATGTGAGC ATGCCACTTC TTGTGTGCCT GTGACTGTTC AGAATGTACA      180
CGGCCCTGCA GCTCCCGAAG GCCAGCTCTG CTGCAACCCC TCCTCTGTCC AACACAGTCC      240
TCACTGGTGT CTTTCTCTCT TCAATCTAC AGCATTTCTG ATCTCTGCAA ACAATTTAAC      300
CCAAACCAA GTTCTGGCTG ACAAGGCTAC ATCTTGTTTC TTGTGCGTGA TTAGCCTCGA      360
G

```

(2) INFORMATION FOR SEQ ID NO:561:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:561:

```

GTTCTAGACC TGCCTCAGAG TATGCCGGA GGTTCATGG CTGGTCCCAG GGCCAGCACA      60

```

```

GGCCCCGAGGC CGGGCTGCCT GGTTTTATTT TTATTTAAC TTTATTTCTG TTTTATGAGT 120
GTGTGTCCGC CCACCCCCAC CCCCTTCAGT GTTAAGTGGG GAGCCCTGGG GGAGTCTCTC 180
CTGCCTCCCA GCCTCTCCCA AGACCTCCCC CCTCGTCACC AGCCATCCCT CTGGACCAGG 240
CAGAGGGCGG ACCGGGTGGG CAGGGGCGTG AGGGTGGCTC GGGCCAGCCC ACCAGCCAAT 300
GGACCCCTCC TCAGGCCGCC AGTGTGCCCC TGCCCTTTT TAAACAAAA TGCCCTCGTT 360
TGTAACCCCT TAACGCTCGA G 381

```

(2) INFORMATION FOR SEQ ID NO:562:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:562:

```

GCACTCATAA AAATCTTACT CAGAAATCTT CAGAGGTTTG CTAAGGATAC AATTGATTG 60
TTACACATTT AATGCTCACC AGCTGCTTAG GCCCACACCA TTATCCACC CTGATTGCT 120
ACTGCTCTTT GAAATACAAC CAGTGTTTCA GCCAGACTGT TTTCTGCTT CTGCTCCCT 180
TCTCCTCCTC CCAGCACATC TGTGAATTCT TTGACTGGT TACCACTCCC AACTCCTCC 240
CCAGCAATGC AGATCTTCTA CACCCTTAG GATCTAAGCT AAGTCTGCTT CCCAGATATC 300
CTCCGAACA GCTCGAG 317

```

(2) INFORMATION FOR SEQ ID NO:563:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:563:

```

GAATTCGGGC TTCATGGCCT ACTTTAATGA GATAGGAACT AGTATATTCA CCGTCTATGA 60
GGCCGCCTCA CAGGAAGGCT GGGTGTTCCT CATGTACAGA GCAATTGACA GCTTCCCCG 120
TTGGCGTTCC TACTTCTATT TCATCACTCT CATTTCCTTC CTCGCCTGGC TTGTAAGAA 180
CGTGTTTATT GCTGTTATCA TTGAAACATT TGCAGAAATC AGAGTACAGT TTCAACAAAT 240
GTGGGGATCG AGAAGCAGCA CTACCTCAAC AGCCACCACC CAGATGTTT ATGAAGATGC 300
TGCTGGAGGT TGGCAGCTGG TAGCTGTGGA TGTCAACAAG CCCCAGGGAC JCGCCCCAGC 360
CTGCCTCCAG AAAATGATGC GGTATCCGT TTTCCACATG TTCATCCTGA GCATGGTGAC 420
CGTGGACGTG ATCGTGGCGG CTAGCAACTA CTACAAAGAA GAAAACCTCG AG 472

```

(2) INFORMATION FOR SEQ ID NO:564:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:564:

```

GCCGCGATGT TCCCCCTTCG GGCCCTGTGG TTGGTCTGGG CGCTTCTAGG AGTGGCCGGA      60
TCATGCCCGG AGCCGTGCGC CTGCGTGGAC AAGTACGCTC ACCAGTTCGC GGACTGCGCT      120
TACAAAGAGT TCGGTGAGGT GCCGGAAGGA CTGCCTGCCA ACGTGACGAC GCTTAGTCTG      180
TCCGCGAACA AGATCACTGT GCTGCGGCGC GGGGCCCTTCG CCGACGTCAC ACAGGTCACG      240
TCGCTGTGGC TGGCGCACA TGAGGTGCGC ACCGTGGAGC CAGGCGCACT GGCCGTGCTG      300
AGTCAGCTCA AGAACCTCGA TCTGAGCCAC AACTTCATAT CCAGCTTTC GTGGAGCGAC      360
CTGCGCAACC TGAGCGCGCT GCAGCTGCTC AAAATGAACC ACCACCTCGA G              411

```

(2) INFORMATION FOR SEQ ID NO:565:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:565:

```

CACTCAGAAC CCTCAGACTT TCAAAGAGCC AGGAAATCGG TATAAAATTT TTGAGATAAC      60
ATTAATTAAG CTTTTTGCG TTTTTCCTAG GACCAGATTA AACAGAAGTT TTCCTTTACA      120
GTATTCATTA TGGTTGGTAT CTCCAGAGTT CATCCTTTT TTGTGGTACT GGGAAAAGTT      180
GCAACATTTA CCTTTGCAGG GACATGGATG GAGCTGGAGG CCATTATCTT TAGCAAATA      240
ACACAGAGCC AAAGACAAAA ACCACTCGAG                                270

```

(2) INFORMATION FOR SEQ ID NO:566:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:566:

```

GTCCTGTTG ACTAACGGCT CATCTTTTCC TTGTTTTTGT TTTTTTTTGT TTCTTTTTTT      60
CCATGTCACT AAAGGCCAAA ACTGGAACCA AGGATTAAAT AACTATTATG ATCAAGGATA      120
TGGAAATTAC AATAGTGCCT ATGGTGGTGA TCAAACTAT AGTGGCTATG GCGGATATGA      180
TTATACTGGG TATAACTATG GAACTATGG ATATGGACAG GGATATGCAG ACTACAGTGG      240
CCAACAGAGC ACTTATGGCA AGGCATCTCG AG                                272

```

(2) INFORMATION FOR SEQ ID NO:567:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:567:

```

GCAATGGCAG GAATTCGAAA TATTGGCATA TGGTTCCTTT GGATTAGATT ATATAAAATC      60
AGAAGAGGTA GAACCAGGCC CCAAGCACTC CTTTTCTCT GCATGATACT TCTGCTTATT      120
GTCCTTCACA CTAGCTACAT GATTATAGT CTTGCTCCCC AATATGTTAT GTATGGAAGC      180

```

CAAAATTACT TAATAGAGAC TAATATAACT TCTGATAATC ATAAAGGCAA TTCAACCCCTT 240
 TCTGTGCCAA AGAGATGTGA TGCAGAAGCT CCTGAAGATC AGTGTACTGT TACCCGGACG 300
 CTCGAG 306

(2) INFORMATION FOR SEQ ID NO:568:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 253 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:568:

GGTGTTTGGC CACAGTTCGG GACCTATGGT AGAAAAATAC TCAGTAGCTA CCCAGATTGT 60
 AATGGGTGGC GTTACTGGCT GGTGTGCAGG ATTTCTGTTC CAGAAAGTTG GAAAACTTGC 120
 AGCAACTGCA GTAGGTGGTG GCTTTCTTCT TCTTCAGATT GCTAGTCATA GTGGCTATGT 180
 GCAGATTGAC TGAAGAGAG TTGAAAAAGA TGTAATAAA GCAAAAAGAC AGATTAAGAA 240
 ACGAGCTCTC GAG 253

(2) INFORMATION FOR SEQ ID NO:569:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 544 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:569:

CACAGTGCTG GCTCACAACA AGATGCTCAA GGTGTCAGCC GTACTGTGTG TGTGTGCAGC 60
 CGCTTGGTGC AGTCAGTCTC TCGCAGCTGC CGCGGCGGTG GCTGCAGCCG GGGGGCGGTC 120
 GGACGGCGGT NATTTTCTGG ATGATAAACA ATGGCTCACC ACAATCTCTC AGTATGACAA 180
 GGAAGTCGGA CAGTGGAACA AATTCCGAGA CGATGATTAT TTCCGCACTT GGAGTCCAGG 240
 AAAACCCCTT GATCAGGCTT TAGATCCAGC TAAGGATCCA TGCTTAAAGA TGAATGTAG 300
 TCGCCATAAA GTATGCATTG CTCAGATTTC TCAGACTGCA GTCTGCATTA GTCACCGGAG 360
 GCTTACACAC AGGATGAAAG AAGCAGGAGT AGACCATAGG CAGTGGAGGG GTCCCATATT 420
 ATCCACCTGC AAGCAGTGCC CAGTGGTCTA TCCAGCCCT GTTTGTGGTT CAGATGGTCA 480
 TACCTACTCT TTTCAGTGCA AACTAGAATA TCAGGCATGT GTCTTAGGAA AACAGAATCT 540
 CGAG 544

(2) INFORMATION FOR SEQ ID NO:570:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 330 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:570:

GAATTCGGCC TCATGGCCTA CATTAAAGAA AAGCTTCCCA CACATCCATT TGAAGCTGAT 60
 CTCCTTGAGA TGGCAGAAAT GATTGCAGAA GATGAAGAGA AGAAGACTCT ATCTCAGGGA 120

GAGTCCCAA	CTTCTGAACA	CGAACTCTTT	CTAGACACCA	AGATATTTGA	AAAAGACCAA	180
GGAAGTACAT	ACAGTGGTGA	TCTTGAATCA	GAGGCAGTAT	CTACTCCACA	TAGCTGGGAG	240
GAAGAGCTGA	ATCACTATGC	CTTAAAGTCA	AATGCTGTGC	AAGAGGCTGA	TTCAGAATTG	300
AAGCAGTTCT	CAAAGGGGA	AACCTCGAG				330

(2) INFORMATION FOR SEQ ID NO:571:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:571:

GAATTCGGCC	TTCATGGCCT	AAGGGAAAAC	ATTTTGCATG	TGTAAAGCTT	CATGAAGTTC	60
TCTTTAAAAA	ATACCAAAGC	TTGTTTATTT	CTGATAATTA	ACCTAAGCCC	TTATGAAAAT	120
AAACAAAATG	AAGGGATTAT	GACAGGTATT	ACCAAAAACA	CCAAAAGGAA	CAAAGGGGCC	180
TGCGTTAAAA	CCTAATTGCT	AATGCTTCAC	AACTAGGAGA	GCATGCCGTC	TTGATGTTTA	240
AAAAACCCAG	GGTCTCCACC	CTTCCTTTGA	TTTGTGCAAT	TCTGTCTTCC	ACAGTTCCGG	300
AGCTTACTCG	AG					312

(2) INFORMATION FOR SEQ ID NO:572:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:572:

GAAAATGTTT	ATGGCCGCAG	CAGGAGTAGA	GGTCTGAGC	CTCCTATTTT	TCTGCATCTA	60
CTGGGGTCAA	TATGCCACCG	ATGGCATTGG	CAACGAGAGT	GTGAAGATCT	TGGCCAAGCT	120
GCTCTTCTCC	TCCAGCTTCC	TCATCTTCCT	GCTGATGCTT	ATCCTCCTGG	GGAAGGGATT	180
CACGGTGACA	CGGGGCCGCA	TCAGCCACGC	GGGCTCCGTC	AAGTTGTCTG	TCTACATGAC	240
CCTGTACACG	CTCACCCATG	TGGTGCTGCT	CATCTACGAG	GCGGAATTCT	TTGACCCAGG	300
CCAGGTACTG	TACACGTATG	AGTCGCCGCG	CGGCTACGGG	CTCATTGGAC	TGCAGGTGGC	360
GGCCTACGTG	TGGTTCGTCT	ATGCTCTCGA	G			391

(2) INFORMATION FOR SEQ ID NO:573:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:573:

GAATTCGGCT	TCATGGCCTA	AAAAAACTC	CAGAAAAAAA	CAACAGCGCG	GTGGTGGGGT	60
TTTGTTAATT	TCGCCTTTTT	TTTTTTTGC	ACGCGCCACG	AAATTCAGGC	TGCGTTTAGC	120
TCCTGAGAAA	TATCCAAAGT	AATTGCAGAT	TCCGGAGACG	CACAGCATTA	GTTCAAAAAA	180

```

GACCCGAGGC ATTGGGGCAG GGTTAGGTGG AGGGCACCGG AGGCTCTACA CAAGAAAAGC   240
AGGAACCTGC AAACCCACGT AGATTTCAC TACAACCTC CCTTTCTTC TGGCTAGCCA   300
TCCAGCGCTC TCCATGGCAC TGCATGGCAC AAGTTGCTC TGATAGCTT TTAAGTTTGC   360
TAAGGGAACCT CCTCGAG                                     377

```

(2) INFORMATION FOR SEQ ID NO:574:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 325 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:574:

```

GAATTCGGCC TTCATGGCCT ACAGCCTCAA GTCACCTCCA AGCCCCCTCC TTGCTGTGC   60
ATCCGGGGGC AGCTCTGGAG GGGGTTTGCT GGGGAACCTG CGCCATCGCC GGGACTCCAG   120
AACC GCAGAA GCCTCCCCAG CTCACCCCTG GAGGACGGCC GGCTCTCTAT AGCACCAGGG   180
CTCAGTGGG AACCCCTC CCACCCTCG GAGTCTGTTT CCAAGGAGGA GAAGGAGCAG   240
AACTATGACT TAACTGAAGT CTCAGAGAGC ATGAAAGCTT TCATATCCAA AGTCTCAACC   300
CACAAGGGAG CAGAGCTGCC TCGAG                                     325

```

(2) INFORMATION FOR SEQ ID NO:575:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 438 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:575:

```

GAATTCGGCC TTCATGGCCT ACTCAGCCTC CCTAATAGCT GGGATTACAA GCGTGAGCCA   60
CCACACCCCG CTGGGAAATA TCTTAAAAGA ATCAAATAA GAAAGTTACT TACTTAAAT   120
CGTGTGCTTT TTCTGTGTGT GATTATGGT AATCTTACCA TGGGGTATCT GATTACTTTA   180
GAAAGATCCA TTTAGCTTAT TTTTCTTC TTTGGGTAT TTTTCTTC CTTCATTG   240
CACAGCCTCC CCCCATAA AAAATAAGA TATAAGTCT ATCTTCTCCC TCTGTGCTAGT   300
TTAAGTAAAA AGAAGTTTGT CTTCATTTT AATAATAGAA TTTGTGTGTA TATAATATAG   360
GCAGTGATTT GGCCTCAAGC TGAGTTTAGA TTTGAAAAGA TGAGAATATT AAAGCTTGTC   420
AGCCAGCCCA CTCTCGAG                                     438

```

(2) INFORMATION FOR SEQ ID NO:576:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 510 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:576:

```

GAATTCGGCC TTCATGGCCT ACTGTNTTCC ATAAAGGCTG TACTAATTC CATTCTCACC   60
AACAGTTCAC TAGGGTTCCT TTTCTCCAC ATTGTTGCCA ACATTCTTTA TCTTGTGTTT   120

```



```

NTTAATAACA GCTATCCTAA CAGGTATGAG GTGATCTCTC TCATTGCGGT TTTGATTTGC      180
ATTTCCCTAA CGGTGGTGA TACTGAGCAT TTTGCATAC ACCGGGTCAT TTGTCTTTG      240
TTGTTGACTT GAGTCCCTTA TATAGTTTGG ATACTGCTGT GGCCTGAATG TTTGTGTCCC      300
CCAAAAATTC GTATATTGAA CTCTCATCCC TAAGGTCAAC AGTTTAGGGA AGCGATTAGG      360
TCCTGAGGAC TCTGCCCTCT TGCATAGAAT TAGTGCTCTT ATAAAAGATG CCCGAGGGAG      420
CTCTTTTGCC CCTCTGCCA TGTGAGGACA CAGCTAGAAG CTACCATCTG TGAACCAGGA      480
AGCCCCCTC ACCAGACACT GTATCTCGAG                                         510

```

(2) INFORMATION FOR SEQ ID NO:577:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:577:

```

GAATTCGGCC TTCATGGCCT AAAAAATAAA AATAAAATAT ACAACCAAAG GCAGTATTCA      60
CAGAGGTATT TCTTGGGAAT AAAAGAAGGA ATATAGTCAT TCCTTGGTAT TCTCTTTGGT      120
GTCCAGAGTT ACTTAAAAAT TCTTGGTGTT TATTGCCTTT TAGTCACAGG GATACACCTT      180
TTATTCATTT ATTTATTTAT TTACCACTCT CATTAGCAG TAGGAATGCA TCTTAGCATT      240
TTTATACTGC TGCTCAACAC AGTGCTTTCA CTCGAG                                276

```

(2) INFORMATION FOR SEQ ID NO:578:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:578:

```

GAATTCGGCC TTCATGGCCT AAATCCTTCC AGATGTCCTG TGAAAATGTT TGAATGCTAC      60
TTGTCTAAAA GTCCACAGAA TCTTAATCAG AGGATGGATG TTTTTTATTT GCAACCAGAA      120
TGCTCTAGTT CTACAGATAG CCCTGTCTGG TATACGTCTA CTTCACTGGA CCGAAACACC      180
TTGGAAAATA TGCTTGACG GGTTCCTTCTA GTAAAAGATA TTTATGATAA AGACAATTAT      240
GAACTGGAGG AAGACACTCG AG                                              262

```

(2) INFORMATION FOR SEQ ID NO:579:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:579:

```

GAATTCGGCC TTCATGGCCT AATTTAGGAC CATTTAAGAG AGTTTGACTA AGAAAGAGCT      60
GTTTGAAACC TCCTGGCTTA TGTATTTTGA GGGGTGTGGT GATCGAGGCT TTCTCCTCTG      120
AGTAGAGTTT GTGCATTGTC AGTATAAGAT TATCATTATC AAACATTCTC ACTAGGCCTT      180

```

TCTCCTCAGC	CCCTAAAAA	ATATGTATAG	TAATGAAGTA	GGAAGATCAT	GTTTATATTT	240
GACTTCACAA	ATTCTCAGG	CTAAGTTGCT	TTCTACTGGG	GTGTGGCTGG	AGACAAAAAT	300
TACAGGTAAG	ACTTGACTTA	ATTTTGTATA	GGGAGGTTCT	TAAGAGGCTT	TTTCGGAATC	360
ACTCACCTCG	CCCACCTCCA	TGCAGGGATG	TGGTGAGAGC	CCTTCAGTCT	ACTTAGGAAA	420
ACCTGGCACA	TGACTCGAG					439

(2) INFORMATION FOR SEQ ID NO:580:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 346 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:580:

GAATTCGGCC	TTCATGGCCT	AGATATTCTC	AGGGTCATCA	AGACTCCTGA	GATAGCAAAC	60
TTGGCCTTGC	TTGGCTTTGG	AGATATCTTT	GCCCTGCTGT	TTGACAACCG	CTACCTGTAC	120
ATCATGGACT	TGCGGACAGA	GAGCCTGATT	AGTCGCTGGC	CTCTGCCAGA	GTACAGGAAA	180
TCAAAGAGAG	GCTCAAGCTT	CCTGGCAGGC	GAAGCATCCT	GGCTGAATGG	ACTGGATGGG	240
CACAATGACA	CGGGCTTGGT	CTTTGCCACC	AGCATGCCTG	ACCACAGTAT	TCACCTGGTG	300
TTGTGGAAGG	AGCACGGCTG	ACACCATGAG	CCACCAGCCG	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:581:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 740 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:581:

GAATTCGGCC	TTCATGGCCT	AGACCTGCCT	CGAGATTGCC	ATCTTGGTTT	TGGTGGGTTT	60
CGGCCGACTT	CTTTGCCACT	TGCTATTTTA	TTTTCTAGGT	CTTTGTGCCC	CGTATTGTGT	120
GCTGAACTCC	NGTCTCATCC	TGTGACTAAG	ATTGCCTAAC	CTCCTGGGAA	TGCAGCCCAG	180
TAGATCTCAG	CCTTACTTTA	CCTAACCCCT	TTTCAAGATG	GAGTCACTCT	GGTTCAAACA	240
CCTCTGACAT	TCGCAGTGGA	ATCCATTAAA	AGATGTAAAG	GAGATATGAT	TATATTTCTA	300
AATTGTCACT	CCAGCATCCC	CTACGCCAGA	CATTATGCCA	GTCTCTATCC	ATACAGTATC	360
TCATTTAATC	CTCCCGTCAT	TAATCTCATT	TTACCAATGA	GTAAACTTGA	AGCAAATGAG	420
TGACTTTCTC	AAGGCTACCT	ACTTACGCCT	TACCAGGGCC	AGGATTCAAA	CCTAGACTTG	480
TTCAGCGACA	GAACACACAC	TTAACCATCA	CCCCTTAGG	CCATGAAGGC	CGGCCTTCAT	540
GGCCTAAACT	GCTGTTATTT	TGGATTATAT	GGAGTTATGA	AAATCTAAAT	GTTTTACAAA	600
GTAAAAAGT	ATTCTTTTTT	TGCTCACTTA	TAACTCAAAA	ATCACTAAAG	TCATTCTGCT	660
AAACATGCCA	CGAAGCCAAG	CTTCTTGCCA	TATGTCTGCA	TAATTTTATT	AAATCACTGC	720
TATTGACGTG	CAACCTCGAG					740

(2) INFORMATION FOR SEQ ID NO:582:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 491 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:582:

GAATTCGGCT	TTCATGGCCT	ACAAAGGGGT	AGCAAGGCAT	GTCTTACATG	GTGGCAGCAG	60
AGAGAGAGAG	CAGGGAAC	TGTCATTTAT	AAAACCATCA	GATCAGTTGG	GTTGTGCAAA	120
TGGTGGAGAA	GAAAACTTCA	GGAAGAGTGC	ATAGACTGAG	CAGAGAAGAG	GACCAGCTAC	180
CTCCGTAGAG	GCAGGGAGAG	CAGCCAAGCT	GGAGCCTGAG	CAGCATTGCT	GGACATGGAG	240
AAGGTCTGGA	ATCTTGTCAG	GGAAGCAAGC	AAAGGGTTTC	TTTCTATTCA	ATGAAGTCCA	300
CTCCCAGGAC	CCTGGGCAGC	AACGGGTGCT	GGACTGGGCC	ACCTGGCAGC	GTCAATCAAA	360
CTGGCAGCTA	GAAATCCTGG	AGAATGACAA	CTTCCAGGAC	GACCCCATG	TGGGACTCCC	420
TCAGCTCAGC	AAGAGACTGC	CACAGTTTCA	TGATGATGCA	GACACCAGAC	AGTAAAAGAA	480
GAAAACTCGA	G					491

(2) INFORMATION FOR SEQ ID NO:583:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 566 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:583:

GAATTCGGCC	AAAGAGGCCT	AAACAGTCCA	GAGAGGCATA	AATCAGACCC	AGTTCCTAGC	60
TGGCTTGTC	TTATCAAGTA	AATGGAAAAG	GGGCCAGGCC	AAAGCAGGGC	AAGATGACCT	120
TGGACTTGGG	AGAGACTTGG	ACTCATGCCA	CAATCCTAGG	GTGCCCCACTG	GACCATTTGCT	180
TTTCTGAGTT	TTGTAGTCAT	TCGGTGTCTG	AAGTAAGGTA	GATTGAAGTG	AGGCCTTCGG	240
TTTCCATCTG	GACCCTTTCT	CTCCTGTTTT	CTTTTTTTCC	GCCTTGTCTC	AGGGATGTTT	300
AATAGCCCAG	AAATGCAAGC	CCTCCTCCAG	CAGATCTCTG	AGAACCCCCA	GCTGATGCAG	360
AATGTGATCT	CAGCACCCCTA	CATGCGCAGC	ATGATGCAGA	CGCTTGCCCA	GAACCCCGAC	420
TTTGCTGCTC	AGATGATGGT	GAATGTGCCG	CTCTTCGCGG	GGAACCCCCA	ACTGCAGGAG	480
CAGATCCGCC	TGCAGCTCCC	AGTCTTCTCTG	CAGCAGATGC	AGAACCCAGA	GTCACCTCTCC	540
ATCCTTACCA	ATCCCCATAC	CTCGAG				566

(2) INFORMATION FOR SEQ ID NO:584:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:584:

GAATTCGGCC	TTCATGGCCT	AGTTGAAAAT	GATCATTACA	CAATATATTC	CTAAACATAA	60
ACTGAGTAAA	CTTGAAACAG	CTCACTGTGT	GGAGAGGACC	ATTCCCGTTT	TGCTCACCAG	120
AACTGGAGAT	TCTTCTGCCC	GCCTCCGCGT	CACAGCTGCA	AATTTTATTC	AGGAAATGGC	180
CTTGTTTAAA	GAAGTTAAGT	CTCTCCAAAT	TATTCCATCC	TACCTGGTGC	AGCCATTGAA	240
AGCAAACCTCT	TCAGTTCACC	TGGCAATGAG	TCAGATGGGC	CTCCTGGCCC	GGCTGCTGAA	300
AGACCTGGGC	ACTGGCAGCT	CGGGCTTCAC	CATTGACAAC	GTGATGAAGT	TTTCAGTGAG	360
TGCCCTGGAG	CATAGAGTGT	ATGAGGTCCG	CGAGACGGCG	GTTTGAATTA	TTTGGACAT	420
GTACAGACAG	CACCAGGCTT	CCATCCTGGA	GTACCTTCCT	CCAGACGACA	GCTAATCTCG	480
AG						482

(2) INFORMATION FOR SEQ ID NO:585:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:585:

GAATTCGGCC AAAGAGGCCT AATAAAGGTG TGGAACTTC ATTCAATCAT ATCTTCAACA	60
CAAATTGTAG GTAGCCTGTT TTTTAAACA TTTATTCAAC AAATATTTAG TCCAAGCCAC	120
TATTACTTAC TACCTTCTCT ACTATTGTAT GGACTTTTAA CTATCTCTGA CACTATTCAC	180
TATTCTTCCA CATTCTCTAT TATTTATACC TATGGTAAAA TTTGCCAGTT TGACCATACA	240
ACTAATACTC ACAGGGACAC TCGAG	265

(2) INFORMATION FOR SEQ ID NO:586:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:586:

GAATTCGGCC AAAGAGGCCT ACTCGAGTTT GGTGCTTTAT TTAGCAAGTG AGTAAAAATA	60
TTGGAATATT TAAGTATTTG CATAAAAAT CAAATGGTAG TGTTTGTAA TCTCTACTGT	120

(2) INFORMATION FOR SEQ ID NO:587:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 503 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:587:

GAATTCGGCC AAAGAGGCCT ACTCGAGTCA GGTCTAGAAT TCAATCGACG GTTTAGGAAA	60
AAGACAATT AAGAGAAGAA CTAAAGAAAA GAACAGAAAC TGAGAAGCAG CATATGAACA	120
CAATTAAACA GTTAGAATCA AGAATAGAAG AACTTAATAA AGAAGTTAAA GCTTCCAGAG	180
ATCAACTAAT AGCTCAAGAC GTTACAGCTA AAAATGCAGT TCAGCAGTTA CACAAAGAGA	240
TGGCCCAACG GATGGAACAG GCCAACAAGA AATGTGAAGA GGCACGCCAA GAAAAAGAAG	300
CAATGGTAAT GAAATATGTA AGAGGTGAGA AGGAATCTTT AGATCTTCGA AAGGAAAAAG	360
AGACACTTGA GAAAAAATT AGAGATGCAA ATAAGGAAC TGAAGAAAA ACTAACAAAA	420
TTAAGCAGCT TTCTCAGGAG AAAGGACGGT TGCACCGAGT GTATGAACT AAGGAAGGCG	480
AAACGACTAG ACTCACTCTC GAG	503

(2) INFORMATION FOR SEQ ID NO:588:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 567 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:588:

```

GCCACTATGG TACCAAAACC TCAGTCTTCA CATAGTCAAA CTTGGACACA AACAGCACCT    60
CCCACAAACA TTCTTATCCT CATCCCAGCA TTGGTTACTG ACCACACACT CTAGCAGGTC    120
ACTCAAGCGC TAATGCTGGG AAGGACCTCT GAATACTTCT CTTTGTCTTG TGCCACACAG    180
CCAGGGTCAC CAAAGCCTGT TAATGCTACC TCCAAAAAAG GCAAATCTGA CCCCTCTTCC    240
TCAAAACCCA GCCACATAGT AAGTTCAAGG ATTCAGTCAC AGGTCTGCCT TAGTGCACTA    300
GCCCTATAAC AGTAAACTAT TCACTTCCCC TCCAGTCCCT TGCCCCCTTT CAAGCAATTT    360
CCTGTACTGC CAAGGGAATT ACTTTTCTAA AATTAGCTAA GAAACTTTTG ATGGTATCTT    420
ACTGTCCCAA AAATAAATTT TAATCCTTC TTTAGCATGG TATAAAAAGG ACACAACAGA    480
GTTTGGTCTA GTGTCCTTTT AAAGACACTA GATTTCTCAT CACCATACCG CATGTACCCT    540
ATACGACTTA TCAATTCCTT ACTCGAG                                     567

```

(2) INFORMATION FOR SEQ ID NO:589:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:589:

```

GAATTCGGCC AAAGAGGCCT AGGCATGGTG AGTTTTGATC TTCTTCCCTT TCTTTTCTTC    60
CCCTTCTTCT TTCCTTCTTT GATCTTCTTC CCCTTCTTTT CTCCCTTC CCCTTCTTTT    120
CAATTTCTCC CACGTCAA                                     138

```

(2) INFORMATION FOR SEQ ID NO:590:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:590:

```

GAATTCGGCC AAAGAGGCCT AGAGAGAATG GAAAAGATAA GGAACAGAAA CAAACAAATA    60
CCGATAAAGA AAAAAATAAA AGAGAAAGGG AGCTTCTCTG ACACAGGCTT GGGTGATGGA    120
AAAAATGAAAT CTGATTCTTT TGCTCCCAAA ACTGATTCTG AGAAGCCTTT TCGGGGCAGT    180
CAGTCTCCCA AAAGGTATAA GCTCCGAGAT GACTTTGAGA AGAAGATGGC TGACTTCCAC    240
AAGGAGGAGA TGGATGATCA AGATAAGGAC AAAGCTAAGG GAAGAAAGGA ATCTGAGTTT    300
GATGATGAAC CCAAATTTAT GTCTAAAGTC ATAGGTGCAA ACAAAAACCA GGAGGAGGAG    360
AAGTCAGGCA AATGGGAGGG CCTGGTATAT GCACCTCCAG GAAAGGAAAA ACCGAGGCAG    420

```

(2) INFORMATION FOR SEQ ID NO:591:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:591:

```

GAATTCGGCC AAAGAGGCCT ACATTGCTTT TCAAATAACT TAAAATAACA CGTTATGTGC      60
CATGTGGCTA CTTTAGTAAT ATTGCCAAGA AGAGCACAGT TTTTACACTA GTGGCATCTC      120
AGTGAAATTA ACCAAAGATG AAGCTTTGGC TTTGCTGGTG AGATCAGAGC CCTCCTGAGC      180
AGGCAGCGCC ACTCCAGGGT TCAGACAGGG CTGCACAGGC GGCAGAGATA CAGGGTCTGA      240
GGGCTGAGAC GCCATGGGGC CGCTGCTGCT TATGTGGTTG GATTGTTTAC AAGCCTCATT      300
ATTAAAACTG AAGGCATTTT TTTTCTCTG CTGCCTTTCC CAAAGTGTTT AGGTTTGGA      360
AAGAGATGAT GATGGTAATA TTTATTTGTG CTTTAAAGC CATTTCCCCA AATGGGACTA      420
GCATGCTTGT TTTCAGTATA CCGTGGCCTG CCTCATGATG GTTTGGAGAT ACTGCTGTG      480
GATGTGAGGT GGGGACTTCA TTCATTGTCC TATTCTATC TNCACTTTGT GCCTGGAGAG      540
CTTTCAGGGG AGGTGGAGGA GGAGGGTCTG CCAAGCTACT GCAACATCTG TCACCCACTA      600
NACCCAGACC T

```

(2) INFORMATION FOR SEQ ID NO:592:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:592:

```

GAATTCGGCC AAAGAGGCCT AATTGAATTC TAGACCTGCC TGAAACCTGT CCCTCCTAGG      60
AAATTGAATA GCTTGAGTTA CGAAGGAAGT GCATGGGACA GACTGAGTTT TGTTCCTCTC      120
TTCCCTGGAA GCTGGATGTC CTTTACAGCT TTGCCAGTA TGTATGTGG CCCCTGAAGT      180
ACATAATCCA GAGTGGACTG CCTTTCAGGG TCCCTCAGCT GTGAAAGTGG AGCATTGATA      240
TCAAGACTAC ATCTTTCTCG TTCAGCTTTC TTCAGCCTTG GAGGAACCAC ACACAATGGA      300
TCCAAGACTT CTGTCCCTTG CTAATTATCT ATAAGAAGTA AATCCATTTC ACATAACTTG      360
TGAATATGTT TTCTTTCACT GGATTTTGGC AAATAGGTAC CCAGTGCATG GTGGACCTAC      420
ACAGTTAGGC CTCTTTGGCC GAA

```

(2) INFORMATION FOR SEQ ID NO:593:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:593:

```

GAATTCGGCC AAAGAGGCCT AAAAGCATTG AGTATTGGTA AAATGAGTAC AGCTAANCGA      60
ACTTTAAGTN AAAAGGAGCA GGAAGAATTA AAGAAAAAGG AGGATGAAAA GGCAGCTGCT      120
GAGATTTATG AGGAGTTTCT TGCTGCTTTT GAAGGAAGTG ATGGTAATAA AGTGAAAAACA      180
TTTGTGCGAG GGGGTGTTGT TAATGCAGCT AAAGAAGAAC ATGAAACAGA TGAAGAAAGA      240
GGTAAATCT ATAAGCCATC TTCAAGATTG GCAGATCAAA AAAATCCTCC AAATCAGTCT      300
TCCAATGAAA GACCACCATC TCTTCTGTG ATAGAAACCA AAAACCTCC ACTTAAAAAA      360
GGAGAGAAAG AAAAGAAAAA AAGCAATTG GAACTCTTCA AAGAAGAATT AAAGCAAATT      420
CAAGAGGAAC GTCGACTCGA G

```

(2) INFORMATION FOR SEQ ID NO:594:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 562 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:594:

```

GAATTCGGCC AAAGAGGCCT AAGAAAACCT AGCTAATAAA GAAAAGCTG TTGCTCAAAT      60
GAAGATAATG ATCTCAGAGT GTGAATCATC TGTGAACCAG CTGAAAGAAA CATTGGTTAA      120
TCGAGATCGT GAGATAAACA GCCTCCGGCG CCAGCTTGAT GCAGCTCACA AAGAACTCGA      180
TGAAGTAGGA AGATCTAGAG AAATCGCTTT TAAGGAAAAC AGAAGACTGC AAGATGACCT      240
GGCTACAATG GCAAGAGAAA ATCAAGAAAT CTCATTGGAA TTGGAAGCAG CAGTGCAAGA      300
AAAAGAAGAA ATGAAGAGCA GAGTTCATAA ATACATAACA GAGGTGTCAC GATGGGAGAG      360
CTTAATGGCT GCCAAGGAAA AAGAAAATCA AGATTGTGTA GATAGATTTC AGATGCTTCA      420
TAACCGTGCT GAAGACTGGG AGGTCAAAGC CCATCAAGCT GAGGGAGAAA GCAGCTCAGT      480
TCGACTGGAA CTTCTTTCTA TTGACACTGA GAGGAGACAT CTTGGGAAA GAGTGGAGCT      540
ATTAGAAAAA GAAATCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:595:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 426 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:595:

```

GGAAGAGCAG AATTGGTGG CTTATCCTCA TGATGGAAAA ATCTTTTCT GCACCTCACA      60
AGATATCCCT CCTGAAAATG AACTGCTTTT TTATTATAGC CGAGATTATG CTCAACAGAT      120
TGGTGTTCCT GAACACCCAG ATGTGCATCT CTGTAAGTGT GGCAAGGAGT GCAATTCTTA      180
CACAGAGTTC AAAGCCCATC TGACCAGCCA CATCCATAAC CATCTTCCTA CCCAGGGACA      240
TAGCGGCAGC CATGGGCCAA GTCACAGCAA AGAAAGGAAG TGAAGTGCT CAATGTGCCC      300
CCAAGCTTTT ATCTCTCCTT CCAAACCTCA TGTCCACTTT ATGGGTCACA TGGGTATGAA      360
GCCCCAAG TGATATTCT GTAGCAAGGC TTTTAGTGAT CCCAGCAACC TGCGAACCCA      420
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:596:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 328 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:596:

```

GAAAAATCAG TCGACTGAAT GACACCATCA AATCTTTGAA ACAACAGAAG AAACAAGTGG      60
AACATCAGCT GGAAGAAGAA AAGAAAGCAA ACAATGAGAA ACAGAAAGCT GAAAGGGAGC      120
TAGAGGGTCA AATCCAGAGA TTGAACACAG AGAAAAAGAA ACTAAATACG GACCTGTATC      180

```

ACATGAAACA TTCTCTCAGA TACTTTGAAG AAGAGTCCAA GGATCTGGCC GGCCGCCTGC 240
 AACGTTTCATC GCAGCGTATA GGAGAGTTAG AGTGGTCTCT CTGTGCTGTC GCCGCCACAC 300
 AGAAGAAGAA GCCGGATGGG TTCTCGAG 328

(2) INFORMATION FOR SEQ ID NO:597:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 529 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:597:

GAGAAGTGC AGAGGGGCCA GTGTTGTTGT TACCTGAAAG GTAAGTGCAG CCCACAAAAA 60
 TGCAGTGAAG AAGAAGATAT ATGCATATGT TTAAGTTAAT ACAATTGAGA TACATTAGC 120
 AGACAGAATC AATAGAGTTG ATGAGTGA CTGCTGGATGT GTGGGGAGTT TATATCACTC 180
 CCAGGTTTTT GACTTGGGCC ACCGGGCACT CAAGAAGGAA AAAGAGGATC CAGGGAGAGG 240
 AACTTTTCTG AGGACTGGGG TAGGGCTGAA CAGCTGCATT CGAGACTGGT GGAGGGTGGG 300
 CTGGGCATGG GATGCACAAA TGGAAATTCC ACTGGGTCTG CAGCTCACAC ATAGGCATGA 360
 CCAGCATAGA GATAGAGAGG CCCAGTGCT GCTGAGTAAC TGTGATTCCC CAGGTGATGG 420
 CATCAGCTGA GAAGGGAAGG AAGCCCATGT GAGGACACTG AAGAAGGAGT GAGCAGACAA 480
 TAAGAAGCCC ACAGAAGACA GAGAAGGAAC AACTAGAAGG AGGCTCGAG 529

(2) INFORMATION FOR SEQ ID NO:598:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 454 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:598:

GAAAAAGATG AAATCTGATG GATTAGGAGC ATCTGGACAT TCGTCAAGTA CCAATAGAAA 60
 TAGTATAAAT AAAACTCTGA AGCAAGATGA TGTAAAGGAA AAAGATGGTA CAAAAATAGC 120
 ATCTAAGATT ACAAAGAAGC TTAATACTGG GGGAAAAAAT GTTCTGGAA AGCCCAAAAC 180
 TGTAACAAA TCCAAACAG AAAATGGTGA TAAGGCACGG TTGGAAAACA TGTCACCTAG 240
 ACAAGTTGTA GAAAGATCAG CAACAGCAGC AGCAGCAGCA ACTGGACAGA AGAATTACT 300
 AAATGAAAA GGAGTGAGAA ATCAGGAAGG GCAAATTCA GGTGCCAGAC CCAAGGTACT 360
 CACAGGAAAC TTAATGTGC AAGCCAAAGC AAAGCCTTG AAGAAAGCTA CAGGGAAGGA 420
 TTCACCATGC CTCAGCATCG CAGAACCCCT CGAG 454

(2) INFORMATION FOR SEQ ID NO:599:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 411 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:599:

GAATTCGGCC	TTCATGGCCT	AGGTCCTCAA	GCATTGCTTC	AATATCAATA	TCGTCTGCCA	60
TTTTCTCTAA	ACGCCTGTTC	CGGCCTTCGG	GCGCCTGTGG	TGCTCGTGTT	CGGGAAGAGA	120
TTGCTGCTGC	TGCTGCTGCT	GCTGCCGCCG	CCGCCGCTTC	TGTTGCTACT	GTAAAGCCCC	180
TAGGCCCAGG	CCGCGGAACC	GCCAGCCCG	AATATCGGGT	TCCAAGGACG	GCTAGGCCCG	240
AGAGAATCTA	AAAAAAACAA	TGGAATTAGA	GAAGCCCACG	CGGGAGAGCA	GGACGGCGGC	300
TTCGGCAGCT	CAGGATCCAC	CCNCGCACA	GCGTCGACAA	GTTCCCTGAA	ATGGCGGCCG	360
CTGCTTCCCT	GTACTCANAN	TCCACCCCC	GAATTCTAGA	CCTGCCTCGA	G	411

(2) INFORMATION FOR SEQ ID NO:600:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:600:

GAATTCGGCC	TTCATGGCCT	AATTAAGCCT	GCCTACTTCT	ACAATGCATT	CTGTTACCTA	60
TTTGAACAGT	ATGTTTGTAA	CTATGGCAAT	GAAGTCAGTA	GATAGGAAAC	CAGTTATTCC	120
TTCTACCTTT	AAAAATTTTG	AGAACTTGCC	AACCAGGGAC	TAAAGCTATT	ATCTTGAACA	180
GAGTCCCTAA	AGCTAGTCTA	GTTTTTGCCA	CATCTGCAAT	GATTATTGTT	TAATTTCAAA	240
AGAATCCTCA	GGCTCTACAA	TCTAGGGGTG	GTAAATGTGT	TTCCACTATA	CTTGGGACCG	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:601:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:601:

GAATTCGGCC	TTCATGGCCT	AGGAATCTCC	TCTTAAACCA	GGTGAAGTGG	GAAAGCAGGG	60
ACCATACCAC	CCTGAGTGAC	ATCTACCTGA	ATAATATCAT	TCCTCGATTT	GTACAAGTCA	120
GCGAGGACTC	AGGAAGACTC	TTTAAAAAGA	GTAAAGAAGT	CGGCCAGCAG	CTCCAAGATG	180
ATTTGATGAA	GGTCCTGAAC	GAGCTCTACT	CGGTCATGAA	GACATATCAC	ATGTACAATG	240
CCGACAGCAT	CAGTGCTCAG	AGCAAACTAA	AGGAGGCCGA	GAAGCAGGAG	GAGAAGCAAA	300
TTGGTAAATC	GGTAAAGCAG	GAGGACCGGC	AGACCCCATG	CTCCCCTGAC	TCCACGGCCA	360
ACGTTCGCAT	TGAGGAGAAA	CATGTCCGGA	GGAGCTCAGT	GAAGAAGATT	GAGAAGATGA	420
AGGAGAAGCA	CCAAGCCCTC	GAG				443

(2) INFORMATION FOR SEQ ID NO:602:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 585 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:602:

```

GAATTCGGCT TCATGGCCTA CAACATGTCA GTTTTTTTTT TCATTTTCCT CAATATTTTT      60
CTTCTNGCTT TCTCTTCTCC TGGTTCCAG CCTCTACTCA ATAGTCCCCC CAGCTTTGTG      120
TGCTGGTCTC GGGGCTTCAT GGAGATGAAT GGGCGGGGGG AGTTGGTGA GTCACTCAAG      180
AGATTCTGTG CTTCACGAG GCTTCCCCC ACTCCTCTGC TGCTATTCCC TGAGGAAGAG      240
GCCACCAATG GCCGGGAGGG GCTCCTGCGC TTCAGTTCCT GGCCATTTTC TATCCAAGAT      300
GTGGTACAAC CTCTTACCCT GCAAGTTCAG AGACCCCTGG TCTCTGTGAC GGTGTCAGAT      360
GCCTCCTGGG TCTCAGAACT GCTGTGGTCA CTTTTCGTCC CTTTCACGGT GTATCAAGTA      420
AGGTGGCTTC GTCCTGTTCA TCGCCTAATA GGGGAAGCGA ATGAGGAGTT TGCACCTCCG      480
GTACAACAGC TGGTGGCCAA GGAATTGGGC CAGACAGGGA CACGGCTCAC TCCAGCTGAC      540
AAAGCAGAGC ACATGAAGCG ACAAAGACAC CCCACACATC TCGAG                        585

```

(2) INFORMATION FOR SEQ ID NO:603:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 368 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:603:

```

GAATTCGGCC TTCATGGCCT AGTCTGGTAG TAAGGTGGAG TGGGTTTGGG GCTAGGTTTA      60
GCTCGGGGGA GGTGGTGTG GGGGCCGCGC GCTGCGCGGT GCCTGGGTAC ATCTCCAGGC      120
CCACGCCCCG GGCTTGGGAA GTCACATCCA TGTCTCTGCG CCGTGCAGCT TTCAAGATTT      180
GCCGAAAGGC TCCAGAGCT CTGTTTTAAA TGGTGAATCC ATCTTAGAA AGAAGCGTGA      240
TTCTCCTTGA AGTGAGCCTG GCATTGTGCA GACAGGAAAC TCCCAGGAG GAGCACCTGT      300
GGTGGTTTGG GTTGGGTTTG TTAAGTGCAG AGAGTGGGAA GAACAGATGC TCCTCACACC      360
GTCTCGAG                        368

```

(2) INFORMATION FOR SEQ ID NO:604:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 604 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:604:

```

GAATTCGGCC TTCATGGCCT AGGAAAGACC ATCAGCCTGG GAGTCAGTGA ACCTGACTCT      60
GATCCCAGCT CTGCCTCCAN TCAGCTGTGT GATGACAGGT AGGTCACCTT CCCTCTCTGA      120
GCCACAGTTT ATCTGTCTGT AAACAGGGGT ATTGGACTGG ATTCTCTGTT ATCTCTCATG      180
TCTCTGTGAA AGGTCTGTGT TTTCAAATAC TCCTTAGGGA CATGACCTCA CATAGAAAGA      240
GGGGGTGCCA CGAACTGGAT TCCAGCACT CCCCTTCCC AGCTCTGCTC AAGCTGAGGG      300
ACCTTGAAC ATGGTACTTG GACCTAAGTA CTCTCTCTGG GCTTCAGTGT CCCAGCTAT      360
AAAATGGGGG AAATGCCTAA CTCAGGAGGT TGAGGTAAGG ACAAAGGAA TTAATACATG      420
GAAAGTGCCT GGAACAGTGC CTGGCACAGT CTGCTTTCAG AAAAGCTGC AAGGTGGCTA      480
CTCTCAGCAG ATATAAGTTA ATGCAGGAAC AGCAACTAGC AGCTCTTGA CATGCAATAT      540
ATTATATATT TTTTGCATCT TTTACCCTTC ACGGCACTGA GCCTCACAAAT CCGTTGACCT      600
CGAG                        604

```

(2) INFORMATION FOR SEQ ID NO:605:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 495 base pairs
 - (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:605:

GCGCAGCCAG	CGCCTGCCTC	CGACTCGACT	CCACACCTGC	TTGCTACAGC	GGGTGAGGAA	60
GCAGGAAAGG	GGGAGGGAGG	GATGTCGTCT	GGATTCTGT	AATAATTTGT	TTCATTGTTT	120
CCAATCGACT	TAGTCACCAG	GTAAATAGT	AGCATAGACC	TTTCAAAAAA	GTAGCTAGCT	180
TATAAGTAGA	TGTATTGAAA	ACACCTGCTT	GTTGAGTCGT	AGACAATTCC	TCATTTACTG	240
TGTGAACTCT	AGGGGGTGAA	ACACGGGCGG	AGAGCGGCTG	TGAGCTCAGC	CGGCTCCATC	300
CCCACAGCGG	CCCAGGGTCA	CTCGGGGCCA	TTAATCAGGC	CGCAGAGCTG	CCCTCTGAGC	360
CGGGCCGCCA	GCGCCACAG	GGCCAGACC	AGGGCTCCCT	GGGCGGGATG	TTTTAAATCG	420
CACAGGGACA	AAGGAAAGGA	AAGACGCTGG	GGCCCAAGCC	CGAGCTTATG	AAACGTTATC	480
AAGGAGCGAC	TCGAG					495

(2) INFORMATION FOR SEQ ID NO:606:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 331 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:606:

GAATTCGGCT	TCATGGCCTA	GACTTCCAAG	GACATGCTTC	GAAGTCTGGC	CCAAGCCAAG	60
AAGGAATGCT	GGGATCGGTT	CCTCCAGGAG	AAGTTAGCTT	CAGAGTTCTT	TGTGGATGGA	120
CTTGATTCTG	ATGAGAGGTG	ACTACAATTG	CAAAGTAGAA	TTTGCTTTGA	CACCTGATGC	180
CAGGACAATA	GTATGTTACC	ATCCTTCTAT	AGACATTCCA	TATGAACGCA	CAAAACCTAT	240
CCCTTGACCA	GATCCTGTGT	ATAATAATGA	AGAAACACAT	GGTCAAGTGC	TGAAACTAG	300
AGAAGAAAAA	AGTGAACACC	TGGAGCTCGA	G			331

(2) INFORMATION FOR SEQ ID NO:607:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 632 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:607:

GAATTCGGCC	TTCATGGCCT	ACTGCCTCGG	CCTCCCGAGT	AGCTGGGACC	ACAGACGCCC	60
ACCACCATGC	CCGGCTAAAT	TTTTGTATTT	TTAGTAGAGA	CGGGTTTCAC	CGTGTTAGCC	120
AGGATGGTCT	CGTTCTCCCG	ACCTCGTGAT	CCGCCCCGCT	CGGCCTCCCA	AAGTGCTGGG	180
ATTACAGGCG	TGAGCCAAT	CGCCCCGCCA	GGAATCCCTC	CTCTGTCTGA	CCTAACTGCC	240
CTCTGCCCTG	GAGCTGCTCA	GCCTCTATCA	ATTTTCTG	CTCTCAGCGA	ACGTTTTCAT	300
TCAGTTGCAA	GACACAGAAA	CTCAAATTCA	AACCTGCTTA	CACAAAATAG	TGAATGTACT	360
GGCTCATGCA	CTTTTAAAG	AGATGAGGTC	TGTTGTGCTG	CCCAGGCTGG	ATGTGAACTC	420
CCGGGCCCAA	GAAATTCTCC	TGCCTCAGTC	TCCTGAGTAG	CTGGGACCAC	AGGAGCATGA	480
CTGTAAGTCC	TGGTGTGAAT	CAGGCTCCAG	AAACAGCTTG	ATCCTGGTTC	CCAACAGTAT	540
GGTCAAACT	CATTCTCTCT	TCTGTCTTCT	TCTCTATGAC	AGGTGCTCCC	TAAGAAGTGA	600
CAAAGAAGGC	CATAACAGC	TCTGGGCTCG	AG			632

(2) INFORMATION FOR SEQ ID NO:608:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:608:

```

GTATNGNTGA AAATAAGAAA AAATATTTCT GAAATTCGGG AACTTGAGAA CATAGAAGAA      60
CACCAGTCTG TAGATATTGC AACTTTGGAA GATGAAGCTC AGGAAAATAA AAGCAAAATG      120
AAAATGGTTG AGGAACATAT GGAGCAACAA AAAGAAAATA TGGAGCATCT TAAAAGTCTG      180
AAATAGAAG CAGAAAATAA GTATGATGCA ATTAAATTCA AAATTAATCA ACTATCGGAG      240
CTAGCAGACC CACTTAAGGA TGAATTAAC CTTGCTGATT CTGAAGTGGG TAACCAAAAA      300
CGAGGGAAAC GACATTATGA AGAAAAACAA AAAGAACACT TGGATACCTT AAATAAAAAAG      360
AAACGAGAAC TGGATATGAA AGAGAAAGAA CTAGAGGAGA AAATGTCACA AGCAAGACAA      420
ATCTGCCAG AGCGTATAGA AGTAGAAAAA TCTGCATCAA TTTGGACAA AGAAATTAAT      480
CGATTAAGGC AGAAGATACA GGTAGAACAT GCTAGTCAAG GAGACCTCGA G      531

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(2) INFORMATION FOR SEQ ID NO:609:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:609:

```

GTGACTTTGG AACCTTGAGA GTTAGATGAA TAAATCAGAA AAATGGAATT AAATGTATCT      60
ACTTTATTAT TGGTAAATCT GGTTAGGATG TGCAGCCCTA ATCAGGCTTC CTTAATTCCT      120
TCTCCACTGA GTCTGGACCA GCACTCTCCA GTAGAACTTT CTATGATGAC GGAAATCCTC      180
TGTGTCTGCG CTGATCAGTG TGGTAGTTAC TGGCCACATG TGGCTGTTGA GTACTTGAAA      240
TGTGGCCAGT GTGGTGATGG AATTGTGTTT TTAATCTTAT TTAATTTAAA TTAAATAGC      300
CAATGTGGC TAGTGGCTGT TGTACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:610:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:610:

```

GTGGAGGCTT TCTTGATCAT GGATGGTGAA GATATACCAG ATTTTCAAG TTAAAGGAG      60
GAAACTGCTT ATTGGAAGGA ACTTTCCTTG AAGTATAAGC AAAGCTTCCA GGAAGCTCGG      120
GATGAGCTAG TTGAATTCCA GGAAGGAAGC AGAGAATTAG AAGCAGAGTT GGAGGCACAA      180
TTAGTACAGG CTGAACAAAG AAATAGAGAC TTGCAGGCTG ATAACCAAG ACTGAAATAT      240
GAAGTGGAGG CATTAAAGGA GAAGCTAGAG CATCAATATG CACAGAGCTA TAAGCAGGTC      300
TCAGTGTTAG AAGATGATTT AAGTCAGACT CGGGCCGAAC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:611:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:611:

GAATTCGGCC	TTCATGGCCT	AAATGACCAN	ATCGAGAGGG	AGGACTATGA	GGACTTTGAG	60
TACATTTCGGC	GCCAGAAGCA	ACCCAGGCCA	CCCCCAAGCA	GAAGGAGGAG	GCCCGAGCGG	120
GTCTGGCCAG	AGCCCCCTGA	GGAGAAGGCC	CCGGCCCCAG	CCCCGGAAGA	GAGGATTGAG	180
CCTCCTGTGA	ACCTCTGCTG	CCCCCGCTGC	CCCCTGACTA	TGGTGATGGT	TACGTGATCC	240
CCAACTACGA	TGACATGGAC	TATTACTTTG	GGCCTCCTCC	GCCCCAGAAG	CCCGATGCTG	300
AGCGCCAGAC	GGACGAAGAG	AAGGAGGAGC	TGAAGAAACC	CAAAAAGGAG	GACAGCAGCC	360
CCAAGGAGGA	GACCGACAAG	TGGGCAGTGG	AGAAGGGCAA	GGACCACAAA	GAGCCCCGAA	420
AGGGCGAGGA	GTTGGAGGAG	GAGTGGACGC	CTACGGAGAA	AGTCAAGTGT	CCCCCATTG	480
GGATGGAGTC	ACACCGTATT	GAGGACAACC	AGATCCGAGC	CTCCTCCATG	CTGCGCCACG	540
GCCTGGGGGC	ACAGCGCGGC	CGGCTCAACA	TGCAGACCGG	TGCCACTGAG	GACGACTACT	600
ATGATGGTGC	GTGGTGTGCC	GAGGTCACTC	GAG			633

(2) INFORMATION FOR SEQ ID NO:612:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:612:

AAATACTAGA	GATAAAGTAG	ATTCATGGCT	TGGTAAGGAA	ATTTTAAGCA	TTCCTTCAAA	60
GATTGACGTG	CTAAAATAAG	CATTGATGTT	TTGAGTTTTT	TTACACCTAG	GATTTTTAGC	120
TTGGGTGTGT	AGGTGAAGGC	CAAGACTCTC	TGCAGGAAAA	AGCTTATTTT	CAAACTCAGA	180
AAATAAAATG	TCAATCATAA	AAATCTACTT	CAACTTTAGC	AAAAAGAAAA	AAAAAATCAA	240
CAAAAAGTAT	ACTCTGTATG	CTGGGATTCC	GAGGTTCCAA	CACACTGTTA	CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:613:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:613:

GATCCAGTGC	TGCAGCTTCC	TTACTATGAA	ATGACAGCTC	CACTTCCTAA	TAGTGCAATC	60
GTGTCTTCCT	CACTGAATCA	TGTTCCAGAT	CTTGAGGCTG	GACCCAGCTC	ATATAAATGG	120
ACTCACCAAC	AACCAAGTGA	CTCTGACCTT	TATCAGATGA	CAGCTCCACT	TCCTAATAGT	180
GCAATCCGTGT	CTTCCTCACT	GAATCATGTT	CCAGATCTTG	AGGCTGGACC	CAGCTCATAT	240
ATAATGGACT	CGCCAACAAC	CCCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:614:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:614:

```

GGTGGAACT ATCCAAGAGG CCTTCTGAAT TCCTCTGACA TATATTGAG AAACCTGGGCT      60
ACTGAAAGCC CTAACCCAC TTGGCTGCAT TTTATTGGT AACCACTGAG GCAAACACCC      120
TTGCCAGACC CCTACCATCC ATCTTGATGT GGTTCCTGCA CTGGACACTG CTTGGGTACG      180
GGCCTGCCA GATCTTGGGA ATGTGGGAG TGGCTCCTCT GAAGCACCAG TGGGCAGAGG      240
ATGAGTCATG GTATCCTCCC GGCACCCTCG AG                                     272

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(2) INFORMATION FOR SEQ ID NO:615:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:615:

```

GAATTCGGCC TTCATGGCCT AGTATTTTGT TAGAGACGGG GCTTCAGCAT ATTGGCCAGG      60
CTGGTCATGA ACTCCTGACC TCAGGTGATC CTCCTGCCTC AGCCTCCCAA AGTGCTGGGA      120
TTACAGGCAT GAACCACTGC ACCCAGTCAA GGGTATAAAA TTTCTACACA GCACAGGCAG      180
ATTCTGGCTG TGAAGACCC CAAGATTCTT TGAATTGTG ATGCTTTATT TAATTTAGAG      240
ATTATCTTCT CTGTCCCACT CTTCCCCTTC CTAATAAGGA CTAGATGCTT GCTGCTTAAT      300
TAGTAAAGCA AATTTAAGAT AATTTTCTGC TTTGAGATT AGGGATAGAT TTTTAAACAT      360
AGTCTTGCTG ATAATGATAG ACATCCTGGG ATGTTGGAAA TTAGGAACT TGAACTTTAA      420
TTGACACAGA CTGAGAATTA TGAAGTAGGA AAAGTTAGAG GATCAGAAAA AATAAATTTA      480
TAAATCACA GCTAGGCTTG GCAATATGAG TGGCGCTCGA G                                     521

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(2) INFORMATION FOR SEQ ID NO:616:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 577 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:616:

```

GAATTCGGCC TTCATGGCCT AGATTGGAAG GTGTGGTAGG CAGAAATCTG GCCCCATGA      60
CTGCCCCTTC CCCTCACACC CCCCAGGTG CTCCAATGGT TATGTCAGT TGCTTGGCAA      120
AAGGGACTTT GTAGATGTCA TAAAGGTGA CTAATCAGCT GACTTGAGAG AGTTTATCCT      180
GGATTATCCA AGGGGCCAG TGTAATTCCA AGAGCCCTCA AGAGCAGAGC TGGAGAGATG      240
CCGCGCAGGA GGCCTGGGTG CCGTTTCGGA GCAGGATGGA AGGCGGTGAA TCCCGCTCC      300
AGCATGGAGC TCGGGAGAG CCCTGACTGC AGATGGAGAG GCTGCCCTGG CCGCAGCGCA      360
CGGGGCTCCT GACCCACAAA AATCGCGAGA TAATGAGTTC ATGTTGTTTG AAAGTCCGTC      420

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ATTCTCGGTA ATTTGCTATA TAAACTATT GCTATACGAT TAAAACTAA TACAGAAGAA	480
TATTTCTTTA ACATTATGTT AAAAAGGAAA AAAGCTAACA TTTTCTTTAT AGCAAAACAC	540
TGCCATGATT TACATTAATA TTAGGAACAT ACTCGAG	577

(2) INFORMATION FOR SEQ ID NO:617:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:617:

GAATTCGGCC TTCATGGCCT AGCACATACA GTATAAAAAA TAATCACCCA CCATAATTAT	60
ACCAAATTCC TCTTATCAAC TGCATACTAA GTGTTTTCAT TACAATTTTT TCCGTATAAA	120
AATACTGGGA AAAATTGATA AATAACAGGT AAGAGAAAGA TATTTCTAGG CAATTACTAG	180
GATCATTGG AAAAAGTGAG TACTGTGGAT ATTTAAATA TCACAGTAAC AAGATCATGC	240
TTGTTCTTAC AGTATTGCGG GCCCTCGAG	269

(2) INFORMATION FOR SEQ ID NO:618:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:618:

GAATTCGGCC TTCATGGATT CTGCTTTGAA TATAGCTACA GAAATAAAGG ATGGACTACA	60
ATGTGGGACA GTGTCTTCTC AGAAACAACC AGCCTTGAAG GCTACAACCTG ACGAGGAAGA	120
TTCTGTTTCG AATATAGCCA CAGAAATAAA GGATGGAGAA AAATCTGGGA CAGTGTCTTC	180
TCAGAAACAA CCAGCCTTGA AGGCTACAAC TGACGAGGAA GATTCTGTTT TGAATATAGC	240
CACAGAAATA AAGGATGGAG AAAAATCTGA GACAGTGTCT TCTCAGAAAC AACCAGCCTT	300
GAAGGCTACA ACTGACGAGG AAGATTCTGT TTCGATTATA GCCACAGAAA TAAAGGACGG	360
AGAAAAATCT GGGACAGTGT CTTCTCGGAA AAAACCAGCC TTGAAGGCTA CAAGTGATGA	420
GAAAGATTCT TTTTGAATA TAACCAGAGA AAAAAAGGAT GGACTCGAG	469

(2) INFORMATION FOR SEQ ID NO:619:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:619:

GAATTCGGCC TTCATGGCCT AGTCCGTGTT GTGGTCAGTG TGTGAACCTC AACTGGACA	60
GTAGCTGAGT TTGGGCAGGG ATGAGGAGTG GAGGGGTGAG GTCTAAGGTT CAGAAAAAGT	120
TTGTGTTTAA GAACTTGTTT AACTGGAGT CAGTTGCAGA CCAGAAATGA GAAAGCACT	180
CCTGACTTGA GTTGGGTGTG CTGGGACTG GATCACCTTT GACCTTCTTT ATTTACCTAA	240

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TTGGAGGGAA GAGCAGGGGA GGCAACACTA TTTCTCTTGG GTGTTAGAG AAGATTGAG 300
CTTATTGGG CACTGGTCTC TATCTTTGCC TTCAGCTGAA TCAACATCTA AGATGTTTA 360
GATGCTTAGC TAATTCCTCT TAAAAAAGA ATAAGCAGAG GCCGGACGTG GTGGCTCATA 420
GCTGTAATCC CAGCAGTGTG GTCTCGAG 448

```

(2) INFORMATION FOR SEQ ID NO:620:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:620:

```

GAATTCGGNC TTCATGGCCT ACTTAAATCC ATCAAGTTAC ACAATCGATC TGTGTCAGC 60
TGAACAGAAC CACATTAAAT TTAAGCCAAA CACACCAATA GGAATGTTGG AGGTAGAGAA 120
GGTAATTTTA AAGCCAAAAA TGTGGATAA GAAAAACCT ACACCTATAA TACCAGAGAA 180
AACTGTGAGA GTAGTGATTA ATTTAAGAA AACACAGAAG ACCATAGTGA GAGTGAGTCC 240
ACATGCATCG CTTCAAGAGC TTGCCCCTAT TATATGTAGC AAATGTGAGT TTGATCCGTT 300
GCATACACTA TTGTTGAAAG ATTATCAATC GCAGGAGCCT CTGACTTGA CAAAATCTCT 360
TAATGACCTG GGACTAAGAG AATTATATGC GATGGATGTC AACAGAGAGT CCTGCCAAAT 420
ATCACAAAAC CTAGATATTA TGAAGGAGGC CCTCGAG 457

```

(2) INFORMATION FOR SEQ ID NO:621:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:621:

```

GAATTCGGCC TTCATGGCCT ACTCTCTGAT TTACAGATTG CTAATTAAAT GGCTATTATT 60
AGTTTGGATT AATTAGACTT AAGAAAACAA CTAAGTGGAG GTTTTTTTTG TTTGTTTTTT 120
GAGGGTTTTT TTTGCATGAG AATTGTATGT AACCAGTGAT ATGATTATTC CTGAATGTAC 180
AGACAGAAGT AAGCCTGGAC ATTGTTAAAT AGTCCTTGCT TTAAGGGACT ACGATAATGT 240
GTACTATGAC AAACGTGCTT TATTCTTCTA ACGCAGTAAG TCTCGAG 287

```

(2) INFORMATION FOR SEQ ID NO:622:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:622:

```

GAATTCGGCC TTCATGGCCT AGTAGGTGTA TCACAGATTT CTAATGTAGA ATGGTCAGTC 60
CAGGAGTAAT TGTAAATTGTG GAAAAATGGA GAATTATAAA ACAAGAATGA TGTGCAAAAA 120
AGGACACAGT TGAATTCATC TGTGTTCCCTC TAAACTATTT CATTTACTCA TTCATCCAAG 180

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TTTTGAAAAA TGTGGGAGT CTGAAAAATT CCAGGCACTC TGGATAAATG AGTATGGAAG	240
AATCCTCCAA AAGAACTTTT AGTCTACAGG GGAACATTAA TAAGCAATCA GGGACTTGAG	300
ACCTACAGTG CTGTGGAAGA TTCTCGAG	328

(2) INFORMATION FOR SEQ ID NO:623:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:623:

GAATTCGGCC TTCATGGCCT AGGACGTTTG GGTGTTTCC ATCTCAAATA AATAAATAAA	60
TAAAAGTCTA TAAAAACAGC TGGGCCCAGG CATTAAAAA AATGTTCCGGT CTTCTAGTTT	120
AGTCTTTTAT TGTCTATGCA AATTCTTTGG CTATTGAACT ATCCAAGCTT TCTCTTTTAA	180
AGCTTTTGGG GAATAGGTTG CAATACATTT CTTGTCTACT GTTCTCTTTA GTGTTTCTTA	240
ATTCTAACC ACTGTTTTTG GAATTTCTAT TAGATGGTTT TGCAACTTCT GCATCTATCC	300
TCCATGCACC TTCACATTC CTTACAGTT TTCGTGCTGT TTTCTTGTG TGCTACATTC	360
TGCACAGGAC TCGAG	375

(2) INFORMATION FOR SEQ ID NO:624:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 763 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:624:

GAATTCGGCC AAAGAGGCCT ACCTCAAAGG ATTGGCTAAA AGCAAGCAAC TGGATTGAAC	60
ACCCTAAGAA GAAAGATTCA CACTGCACCA GGAGACATCA GAAAGAATGA AACTCTGCC	120
GCTGTTTGTG TGCATCTGTG CACTGAGTGC TTGCTTCTCG TTCAGTGAAG GTCGAGAAAG	180
GGATCATGAA CTACGTCACA GAAGGCATCA TCACCAATCA CCCAAATCTC ACTTTGAATT	240
ACCACATTAT CCTGGACTGC TAGCTACCA GAAGCCGTTT ATTAGAAAGT CCTATAAATG	300
TCTGCACAAA CGCTGTAGGC CTAAGCTTCC ACCTTCACCT AATAACCCCC CCAAATTTCC	360
AAATCCTCAC CAGCCACCTA AACATCCAGA TAAAAATAGC AGTGTGGTCA ACCCTACCTT	420
AGTGGCTACA ACCCAAATTC CATCTGTGAC TTTCCCATCA GCTTCCACCA AAATTACTAC	480
CTTCCAAATG TGACTTTTCT TCCCAGAAT GCCACCACCA TATCTTCAAG AGAAAAATGTT	540
AACACAAGCT CTTCTGTAGC TACATTAGCA CCAGTGAATT CCCCAGCTCC ACAAGACANC	600
ACAGGTGCCC CACCCACACC TTGTGACAAC TACACNAGCT CCACCATCTT CCTCAGCTCC	660
ACCAGAGACC ACAGTNGCCC CACCCACACC TTTTGCAACT ACACNAGCTC CACCATCTTC	720
CTCAGCTCCA CCAGAGACCA CAGCTGCCCC ACCCATCTTC GAG	763

(2) INFORMATION FOR SEQ ID NO:625:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:625:

GAATTCGGCC	AAAGAGGCCT	AGTAGTTTCT	ATGTGCGGTC	TGGGGTGGGG	GCAAGGCCCT	60
TGTGTTCCAC	TGGTTTCCAC	CACGTTGACA	GCAGTCGCTG	GCAGCAGAGA	GCCATTTCCT	120
GTCATGCTGG	TCTGTTCCAG	GACTCTGTGG	AAGATTCTCT	ATCTCCACTG	GCACAGGAGC	180
AGAGGAAATG	GAAGGACTCA	CAGGCAGAGC	AGATCTCATC	CCCCAAGCCT	GTTGGGAGCC	240
ATTACTTTGG	GTCGAAACAT	TATTGTGAAC	ACTAAGTTCT	TCAGGTTTTG	TAGCACATGC	300
TTTCATTGTG	AGAGTTCGTC	TAGAATATCG	TTTGCTGGGC	CTTCTTTCAA	AGGATGTTGA	360
TCTTCTTGCT	TTATTGGTTT	TTGTGGTCTG	ATACTCTGTT	TTCCCACTAT	ATCTAAATCG	420
TGATCCTAGT	CGAATAAATC	CTGATCGATG	AGAACTCTTT	TGGACGGGGC	CTCGAG	476

(2) INFORMATION FOR SEQ ID NO:626:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:626:

GCGATTGAAT	TCTAGACCTG	CCTCAACTGT	CTGGTTTCCT	GTAAAAATAAA	CACATTGTTT	60
TATATTTTTA	GGGAACAAAA	AGTGCTGCTA	TAGGGTTCAA	AGTTTTCTCT	CTGAACACTT	120
TTCCGAAACA	AATTACCCCA	AAGACACATT	TTGAATATCC	TGGTCACATC	TTGGGATCTG	180
TAAAAATATAC	CTTTTAGTAT	GGCACCTGTT	AAAATGCAAA	GCAAAAACCT	CGAG	234

(2) INFORMATION FOR SEQ ID NO:627:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 583 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:627:

GAATTCGGCC	TTCATGGCCT	AGGCCTTGTG	AATCATTAG	CATAAGGAAC	TGTCAATATT	60
TTTTTGAGCT	GTCAGAAATC	CATTAGTGA	TTTTCGACAA	TTCAAAAAAA	TATTTCTGAC	120
CGCTTGATTG	AGTTCTTAGT	GAATTAGGGA	AGAAGAGGAA	TAAAAGAAAT	ATATCAATCT	180
AAATTATGAA	CCCAGAGTCT	AGCTTCCTGA	ATTCTTCTCT	GTGCTTAAAC	GAACAACAGG	240
ATGTTGAGGT	TCAAAAATAC	TCTCTTCTAT	TTCCCCCCTT	TCCTTCCCTT	TTCTTTCTTT	300
CTCTTCCATT	CCTCGAAAAG	ATAATAAAAC	AGAATGTGCC	TAGAGCTTCT	GGAAAGAATA	360
CAGTCCTGCT	GATACTAGAA	CTCAGTGAAA	TTTGCAACAG	ATTTCTGAGC	TACAGAAGTG	420
AAGATAATTC	ATTTATTTC	AGCCACTGAG	TTTGTGGTAA	ATTTGTTACA	GAGCAATAA	480
AAATCTAATA	CATGCCTTCT	ATACCAGAAG	TACACATCCA	CGTGACCATT	CCTGTCCTCA	540
CCCCACACAC	ACATACACAC	ACACACACAC	ACGCACACTC	GAG		583

(2) INFORMATION FOR SEQ ID NO:628:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:628:

GAATTCGGCC	TTCATGGCCT	ACCTGCCTCG	AGTTCCTACT	GCCCCCGGGC	GGCCTGCACA	60
GAGCTGCTGC	CCTCCAGAGA	CTGTGAATCC	CAAGCCTGAC	TCAGTGGACT	GCTTCCTGTT	120
CCCCTCCCTC	CTCTTCCTCA	CCTTGTTCTG	CACCCCTCAAG	CCTTTCTCCA	ATGCCTCCCA	180
GGAGGATTTG	GGGACTTTCT	CCCTGGGGCG	CCCAGATCCA	GCTCGGAGGC	CTCACTGGGA	240
CCTGGCAAGG	CCTGACCTCC	CGCCCAAACT	TGCTTCTGTA	GCCCCCTAC	TCGAG	295

(2) INFORMATION FOR SEQ ID NO:629:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:629:

GAATTCGGCC	TTCATGGCCT	AACCTGTTGC	TCCCCCTGGG	ACTGAAGGCA	GAAGTGA CTC	60
CCGAAATTCT	CTTTCTGGAC	TCAGAAGGAA	ACCAAAGCAA	TTGATGACAC	CGCATCCCAT	120
ACTAAAAGCT	ATGGAAGAGA	GAGCAATTCA	ACGAGCTGAA	TGTAGGCGGA	TCTTGGCAGA	180
GAAGNAGAAA	AAACAAGAAG	AAGANAAATT	GGCCCAAGTTA	AAGGCCCAAG	AGGAGGAACG	240
TCAGAAAAGG	GAGGCAGAAG	AAAAGGAGGC	ACAGCTTGAA	AGAAAACGAG	AAGAGAAGAG	300
ACTGAAGAAA	ATGAAAGAAC	TTGAGAAGCA	GAAGAGAACT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:630:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:630:

GAATTCGGCC	TTCATGGCCT	AGTTCTTCCT	TAGGAACAAG	GGCAGGACCT	CAAACAGTCC	60
AGAGGAGAAG	CCTGGGGTGG	TCAGGGAAGG	CTTCCTGGCT	GAGAGGACAG	GCTTAGGGGC	120
ACCTTGAAAG	TTCAGGCTGA	CTGGGGCTAG	GGGCATGTGG	GTAACAGGTT	AAAGGGGGGG	180
GGGCTGGAAA	ATGCAGACAC	CAAAGACCCT	TCAATATGAG	GCCAAGAAAG	GAAGGTTTCA	240
AACAGGGATC	ACTCGAG					257

(2) INFORMATION FOR SEQ ID NO:631:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:631:

GTTCCAAATC	CATGGGAACC	AGCACAGGAG	CTACAGCAAA	TCATGGCACT	TCTGCAGTAG	60
CAATTACTAG	CCATGATTAC	CTAGGACAAG	AAACTTTGAC	AGAAATCCAA	ACCTCACCAG	120
AAACATCAAT	GAGAGAGGTG	AAAGCGGACG	GAGCTAGCAC	CCCCAGGTGA	AGAGAACAGG	180
ACTGTGGTGA	ACCTGCCTCG	CCAGCAGCAT	CCATCTCCAG	ACTCTCTGGG	GAACAGGTCG	240
ACGGGAAGGG	CCAGGCAGGC	AGTGTATCTG	AAAGTGC GCG	GAGTGAAGGA	AGGATTAGTC	300
CAAAGAGTGA	TATTACTGAG	CTCGAG				326

(2) INFORMATION FOR SEQ ID NO:632:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:632:

GAAAAAATGG	AAGAATTTGT	TTGTAAGGTA	TGGGAAGGTC	GGTGGCGAGT	GATCCCTCAT	60
GATGTACTAC	CAGACTGGCT	CAAGGATAAT	GACTTCCTCT	TGCATGGACA	CCGGCCTCCT	120
ATGCCTTCTT	TCCGGGCCTG	TTTAAAGAGC	ATTTTCAGAA	TACACACAGA	AACAGGCAAC	180
ATTGGACAC	ATCTCTTAGG	TTGTGTATTC	TTCTGTGCC	TGGGGATCTT	TTATATGTTT	240
CGCCCAATA	TCTCCTTTGT	GGCCCTCTG	CAAGAGAAGG	TGGTCTTTGG	ATTATTTTTC	300
TTAGGAGCCA	TTCTCTGCCT	TTCTTTTCA	TGGCTCTTCC	ACACAGTCTA	CTGCCACTCA	360
GAGGGGGTCT	CTCGGCTCTT	CTCTAACTG	GATTACTCTG	GTATTGCTCT	TCTGATTATG	420
GGAAGTTTGG	TTCCTTGGCT	TTATTATTCT	TTCTACTGTA	ATCCACAACC	TATTCTCGAG	480

(2) INFORMATION FOR SEQ ID NO:633:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:633:

GAATTCGGCC	TTTATGGCCT	AGCGGGATCG	TATCACTACG	CACGTGGCGT	CAATGACAAA	60
GACGCCTTCC	CCACGGGACA	GGCCCTGGGA	ACTGCGGGGC	AAGGTGTGGG	CACGGCGGGT	120
CGCCTTCCAA	CCCTCCAGGG	TCTCCGGTCC	TGCCCTCTCT	CCAAGACCCA	GAGATTCTCT	180
CCATCCGGTG	CCTCCGGGAG	CCCAGGGTCT	GGGGAGTGTC	TGGCTATGGC	GGGGCGGCTG	240
CTTTTATAGG	GAGGGAATCC	AGCATTGGG	AAACCAGATC	TGTTCTCCTT	CTTCCCTTC	300
CCTCGAG						307

(2) INFORMATION FOR SEQ ID NO:634:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:634:

CCTCTGCAAG	AAATGCCTAA	GCGTATTATC	AGGAAGTGA	ATTATAAAAT	GTTTCCAGAT	60
CAAATTAAGC	ATCTACAGGT	GAATTAATAT	AGAATTAAGC	TTAGAAAGCT	TAAGTAGAAG	120
TTGAATGAAT	TGTGTTCAAT	CTTTGAAACC	CATTGATTG	CAAAACCAAT	ATTCCACTGT	180
CTATAGGAGG	CAATTCAGAC	TGAAAATAAT	TTAGAAAAAA	AAATAGTCCA	GAAAAAATAA	240
TAGTTCTAGA	GATAAATAGG	TCATTTGAAG	ACTAACCTCT	GCCATTAGGG	GTTTCTAAAG	300
ATAGGCTGAC	TCTATCTATT	TAATAATTAT	TTGTTTCATT	AACTCCTTGC	ATATAGAATT	360
GTAAGTGATA	CCAGCCAGGT	ACGGTGGCTC	ACGCCTGTAA	TCCCAGCACT	TTGGGAGGCC	420
AAGGCGGGCA	GATCACCTAA	GGTCGGGAGT	CTCTCGAG			458

(2) INFORMATION FOR SEQ ID NO:635:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:635:

GAATTCGGCC	TTTCATGGCCT	ACCCACTCTC	ACTTTGTACC	TCTGTCAGTT	ATCTCCTCTT	60
TACCCTTCTT	TCAACGAGCA	TACCACCGGC	CCTCCCAGCA	CCTATGGCCC	AAGCCAGTTG	120
TTTGCAAATT	TTTACTGTG	ACACAGGACA	ATTTACACAC	ACATACACAG	TTTCACTTGT	180
GACATACTTT	TTTTTTGAGA	TGGAGTCTCA	CTTCATTGCC	CAGGCTGGAG	TGCAGTGGTG	240
TGATCACACC	TTATTGCAGC	CTCAAATCC	TGGGCTCAAG	TGGTCTTCTT	GCCTCAGCCC	300
CCCTAGTAGC	CAGGATTACA	GGCGTGCACC	ACCATTCTCT	GAG		343

(2) INFORMATION FOR SEQ ID NO:636:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:636:

GTGGATAACA	AACAAACAAA	TCTGATGCTC	CCTGAGTCAA	CTGTTTATGG	TGATGTGGAC	60
CTTAGTAACA	AAATCAATGA	GATGAAAACC	TTCAATAGCC	CAAATCTGAA	GGATGGGCGT	120
TTTGTCAATC	CATCAGGGCA	GCCTACTCCT	TACGCCACCA	CTCAGCTCAT	CCAGTCAAAC	180
CTCAGCAACA	ACATGAACAA	TGGCAGCGGG	GACTCTGGCG	AGAAGCACTG	GAAACCACTG	240
GGACAGCAGA	AACAAGAAGT	GGCACCAGTT	CAGTACAACA	TCGTGGAGCA	AAACAAGCTG	300
AACAAAGATT	ATCGAGCAAA	TGACACAGTT	CCTCCAATA	TCCCATACAA	CCAATCATAC	360
GACCAGAACA	CAGGAGGATC	CTACACAGC	ACAGAGCTCG	AG		402

(2) INFORMATION FOR SEQ ID NO:637:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:637:

GCTTCCTCGC	AGCAAAGCGG	TGGAGATAGA	GAAGAGCTTA	CTGGTGCGAG	CGTCCGTCGA	60
CCCCGTGCGC	GCTGACCTAG	AGATGGCAGC	CGGTCTCACC	GACATATTTC	AGCATGATAC	120
ATACTGTGGT	GATGTCTGGA	ACACCAACAA	ACGCCAGAAT	GGCAGACTCA	TGTGGCTCTA	180
TCTCAAATAC	TGGGAACG	TGTGCGAACT	GAAGAAGTTT	AAGAGAGTAG	AGGAAGCCAT	240
ACTAGAAAAG	TAAGACAAGA	GTGAAATCAA	ACTGCTTTTA	GTGACTCGAG		290

(2) INFORMATION FOR SEQ ID NO:638:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:638:

GTCGAGAAAA	TGGGGATAAT	GGAGAAATTG	TGGGCAAGCT	GGCTTCCTGG	GAAGGGACTA	60
ATTGAACAAG	ACAATGATTT	ATCTTTTCGG	GGTTCAGAGG	CAGCTTGTTA	ATTCGAATTA	120
TTTTCTTTAT	TTTTGCCAC	AAGTGTGTTG	TGTGCTTTT	CTCTGGCTTT	TTACCTGATC	180
AGGCTGCAAG	CTGCAAAGGT	GTGGCTTGTG	CTGCAGATTT	GTAATAAAAG	ATGACAGGTG	240
AGAGAGACAG	TGGTGAACT	GGTAGAGCTT	GCACACCCAC	ACGGTGTGGC	TGCTCGGGAG	300
GCTGTCTAGT	GCACCTGCCA	ACAGAGCACA	GATATCCTCT	CTTCCTCATT	TCAGATTCTT	360
CCTTCAGCT	GTTTACTAAA	CAGCAACAAA	AACACCTCT	TGGCTGTAA	TTGTCAAATA	420
AAGTCCCTGC	AAAGTGATA	AGATTTCTCT	CCCCAACCTC	GAG		463

(2) INFORMATION FOR SEQ ID NO:639:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:639:

GCGAGGGAGA	TGGCAGCCTG	GGCTTTAGCA	GCAGGGAGGA	AGGTGAANAA	AGAACCGGGG	60
CTTGCAGCAG	AGGTGGGTTC	TGCCTTAAAG	GCAGAGACCC	CCAACAACCTG	GAATGCCACG	120
GAAGACCAGC	ATGAGCCTAC	CAAACCTTTG	GTTGCGAGGG	CTGGAGCTAA	TTCTCGCTCC	180
AGGAGAAAGA	AGCAGAAGAA	GAATCCAGG	CAGGAAGCAG	TGCCCTGGAA	AAAACCCAAA	240
GGCATCAATT	CCAACAGCAC	AGCTAACTTG	GAGGATCCTG	AGGTGGGTGA	TGCTGAAAGC	300
ATGGCGATCT	CAGAGCCGAT	CAAGGGCAGC	AGAAAGCCCT	GTGTGAATAA	GGAGGAGTTG	360
GCTTTGAAGA	AGCCCATGGC	GAAATGTGCC	TGGAAGGGTC	CCAGAGAGCC	ACCTCAGGAT	420
GCCCGGGCAG	AAGCCGAGAG	CCCAGGAGGC	GCCTCTGAGT	CAGACCAAGA	TGGTGGCCAT	480
GAAAGCCAC	CAAAGAAGAA	GGCCGAGCTC	GAG			513

(2) INFORMATION FOR SEQ ID NO:640:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:640:

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GAATTCGGCC TTCATGGCCT ACACCTCAGC CTCAGAGCA GCTGGGACTA CAAACGTGTG      60
CCACCATGCC GGGCTAATTT TTGTATTTTC AGCAGAGGTG GGGTTTCACC ATGCTGCTGG      120
CCAGGCTGGT CTCGAATCC TGGCTTCAAG TAATCTGCCC ACCACAACCT CCCAAAGTGC      180
TGGGATTACA GGTGTGAGCC ACTGCGCCCA ACCAAGAGCT CCTTTTGTGTT TTTCTTTTTT      240
TGTGAATTCG GATTCTTTAT ATTGAGGAGT TTTACTTAAA CTTTGAATCT GAAAGAAACT      300
TTAGGAGGAG CTCATAGATT TGTGGGAAGA AGCAAATCTA CATTATTTTC TCTCTTCTAA      360
AATCATATTC CATGTATTTT GATCTTTTAC TGAATTTTAA CACATTGTTT CATCACTAAC      420
ATAAAGTGTG TCAATAGTTT TTGTAAGTCA CACACAAATA CTGGATTAA AAGTTATATA      480
CCTGAGTATA TTTTATGGC AGGTCTCGAG      510

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(2) INFORMATION FOR SEQ ID NO:641:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:641:

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GAATTCGGCC TTCATGGCCT AGTGTTCCTA GCCAGTCTCT ATTCTCTCAC CTAACACTCT      60
CAAGGAGATA GAAGCTTCAG CTGAAGTCTC ACCCACCACG ATGACCTCCC CCATCTCACC      120
CCACTTCACA GTGACAGAAC GCCAGACCTT CCAGCCCTGG CCTGAGAGGC TCAGCAACAA      180
CGTGGAGAG CTCCTACAAT CCTCCTTGTC CCTGGGAGGC CAGGAGCAAG CGCCAGAGCA      240
CAAGCAGGAG CAAGGAGTGG AGCACAGGCA GGAGCCGACA CAAGAACACA AGCAGGAAGA      300
GGCTCGAG      308

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(2) INFORMATION FOR SEQ ID NO:642:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:642:

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GAATTCGGCC TTCATGGCCT AGTTAGATGA AAATCTAAAG GATGAATACT TTGAGGAAAT      60
CATGGAAGAA TATGAAGATA TTAGACAGGG CCATTATGAG TCTCTCAAGG AGAGGAGATA      120
CTTACCCTTA AGTCAAGCCA GAAAAAGTGG TTTCCAAATG GATTGGCTGT CTGAACCTCA      180
CCCAGTGAAG CCCACGTTTA TTGGGACCCA GGTCTTTGAA GACTATGACC TGCAGAAGCT      240
GGTGGACTAC ATTGACTGGA AGCCTTTCTT TGATGTCTGG CAGCTCCGGG GCAACCCCA      300
TCGAG      305

```

(2) INFORMATION FOR SEQ ID NO:643:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:643:

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GCGATTGAAT TCTAGACCTG CACCCAGCCA ACACTGAGAG ATTTTAATGA GTACTTTTAT      60
CCACCTGACC ACCATCATT A CCTATCACCT GTCATTCTTC ATCCACCCTA CATCCATCCT      120
TCATCCCCCC ATCATCCACC CATCTATCCT TCATCCATCC ATTCATCATG GAACCATTTAT      180
CCATCCAACCT ATCATCCAGC CAGCCAGAAA TGACCCATTC ATCTTCATCT CTCATTTCCT      240
CTCTCTAAAC CAGTTCTTAA TCTGGGGCCA AAGTCCTACC CACACATCCC TTAGTCTCGA      300
G                                                                                   301

```

(2) INFORMATION FOR SEQ ID NO:644:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:644:

```

GAATTCGGCC TTCATGGCCT AGATCCCCCG TGGAGAAAGC AGTGACACAT TCACACAGCT      60
GTTCCCTCGC ATGTTATTTT ATGAACATGA CCTGTTTTTC TGCCTAGAC ACACAGAGTG      120
GAACAGCCGT ATGCTTAAAG TACATGGGCC AGTGGGACTG GAAGTGACCT GTACAAGTGA      180
TGCAAAGGAG GGTTCCAAAG AAAAAGGATT TTGTTTAAAA TACTTTAAAA ATGTTATTTT      240
CTGCATCCCT TGGCTGTGAT GCCCCTCTCC CGATTCCCA GGGGCTCTGG GAGGGACCCT      300
TCTAAGAAGA TTGGGCAGTT GGGTTTCTGG CTTGAGATGA ATCCAAGCAG CAGAATGAGC      360
CAGGAGTAGC AGGAGATGGG CAAAGAAAAC TGGGGTGCAC GCCTCGAG                      408

```

(2) INFORMATION FOR SEQ ID NO:645:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:645:

```

GAATTCGGCC TTCATGGCCT AGTTATGTGA TTAGGAGTAG GGTAGGATG ANTGGGAAGA      60
AGAAAGAGAG GAAGTAAAGT TTAATTATGC CTTTTTGGGT TTATTATCCC TGATGCATGT      120
GGCCCCCCAC TGCTGTGTCC TTCTCCTGTT GGCTAGGGTT AGACCACACA GGCTAAACTA      180
ATTCCGATTG GCTAATTAA AGAGAATGAC GAGGTAAGTG TTTTGGCGGG AAAAATGGTT      240
ATGACAGAGC AGGTAATAGG AATGAGTTAG GGTGGAGTAG GTAATCGGAA TGAGTCAGGG      300
TGGAGCAGGT AATTGGAATG AGTCAGGTA GAGCAGGTAA TCGAAAAGG TTGCTTTGCT      360
CGAG                                                                                   364

```

(2) INFORMATION FOR SEQ ID NO:646:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:646:


```

GAATTCGGCC TTCATGGCCT AGGAGTGCAT TTGGATCTAG TGTTTTCTAT CAATCTGTCT    60
GCTGATGTGG CACTACTGCA CCATTTACCA CAACATTAGA ATATGTCTGA GTAACCTGGTT    120
GGCTTAGATT TTTTGCATTG AGTCCCACCC CATTTTCCAG AACTTTCATG GCTATTCTTA    180
TATGTTTGTT TTCCGTAAGA TCTTTAGGAT CAATTGTCT AGTTCTAAAG AGGAAATTCT    240
GATATTATTG ATTTAGTAAC TTTCCATGAA AAAAACCTAC CATCACAGGA AAGATGCACA    300
TTAATTACAG GTAGCTCGAG                                         320

```

(2) INFORMATION FOR SEQ ID NO:647:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:647:

```

GAATTCGGCC TTCATGGCCT AGTCAGTGGC TAGATTGATT GATCCTCCAG AATTAGACAC    60
TCACATGTTA ACACCAGTCT CAGTTGGAGG GCTGATAGTA AACCTTATTG GTATCTGTGC    120
CTTTAGCCAT GCCCATAGCC ATGCCCCATGG AGCTTCTCAA GGAAGCTGTC ACTCATCTGA    180
TCACAGCCAT TCACACCATA TGCATGGACA CAGTGACCAT GGGCATGGTC ACAGCCACGG    240
ATCTGCGGGT GGAGGCGAGG TCTCGAG                                         267

```

(2) INFORMATION FOR SEQ ID NO:648:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:648:

```

GAATTCGGCT TCATGGCTAC TTTTGGTAAA GCATACCCAA CCTTCAGTTA GAATATCTCC    60
TGATAATAAG AAAGATCTCA TTGAAATTTA TTAATTCTTT TGTGTCTAGT AGATAACTTG    120
GATGGCACAC AGTGCTTTGA TTTTACCTG CCCAGAAATT AACTCCTCAT CCTATCCTAC    180
ATGATTTTCT TTTTCTCTC CCCCTTCCTC TTTTATTCCA TGTCAGTGGG AATGGCAGGT    240
CTTGACCAA GTAATGGCAG GTCTTGACC AAGCAAGCCA GAAACCTGAG CTTTAGTCTT    300
TATTCCTCCC CACTTCTCGA G                                         321

```

(2) INFORMATION FOR SEQ ID NO:649:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 559 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:649:

```

GAATTCGGCC TTCATGGCCT AGAGGAAGTG AACGGATGGG GCCTCATCCT CTGCCTCCC    60
TAAAGGGTGA GGGTGAAGG ATGGGGCTGT GCCCTCTTAG GGCAGGAAA AACAGCTTG    120
AGGGGTTTCT GCCATCAGAG ATCCCATAGG AGGCAGGTCA GTCCTGCAGA ATTTCTCCCC    180

```

```

AGTCTGGCCT CCAGCCTCCC TGGCCCTTT CTAGAGGCCT CCATCCCACT GGCGGCTTGC 240
TCCTGCCACC GGGCCTCTGC ACAGTCACCT CCTGCAGCCT GGGGTGTGTC GCCTCTCCAC 300
GTCTTGATAT TTTTGCTGGA ATGCAGACGA TACTATATTT ACCGTATAAT ATATTATCAG 360
CTCTCCTATA TCTCAGTCAA TTTACATAGT TTAATAATAGA ACATCTTATT AAAACATCT 420
AGATATACAC AGATTAGGAA ACGCTTACAA CATACAAATA CACAACTAG AAATAATCT 480
TTAGCATACT GGTATATACA ACAGTGTGAT ACAATAAATA ATTCATTCA TGCTCTATCT 540
ACACATCATA TTGCTCGAG 559

```

(2) INFORMATION FOR SEQ ID NO:650:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:650:

```

GAATTCGGCC TTCATGGCCT AGGGAGACTG AGGCAGGCAG ATCACCTGGG GTCGGGAGTT 60
CGAGACCAGC CTGACCAGCA GGGAGAAACC CCGTCTCTAC TAAGAATAGA AAATTAGGTG 120
TGGCGGTGCA TGCCTGTGGT CCCAGCTACT CGGGAGGCTG AGGTAGGAGA ATCGCTTGAA 180
CCCGGGAGGC GGAGGTCATG GTGGGCCGGG ATTGCACCAT TGCACTCCAG CCTGGGCAAC 240
AAGAGTGAAA CTCCTCTCA AAAAAATAAA AGCCTAGCCT CCCAAAGTGC CAGGATTACA 300
GGCATGAGCC ACCGCGCCTG TCTGTCCGCC CGTCTTCTTT TTTAAGAGCA AGAAAAGGTT 360
TCCCAGAAGT ACTCTGGTAG ATTCTTATCA CACACACATT CCTAAACCAG TTAGTGGCAA 420
AGAAAATAGA ATTATCATGA TTAATTAGCA TATTCTGAAG NACATGCTTC CCTCGAG 477

```

(2) INFORMATION FOR SEQ ID NO:651:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:651:

```

GTGTGAACCT ACGGGAAGGC GGCCGCCTGC ACCTCTGTGC GGAGACCAAG GATGATGCCC 60
TAGCATGGAA GACAGCACTG CTGGAGGCAA ACTCCACCCC GGTGCGCGTC TACAGCCCGT 120
ACCAAGACTA CTACGAGGTG GTGCCCCCA ATGCACACGA GGCCACGTAT GTCCGCACT 180
ACTACGGACC GCCCTACGCA GGCCCTGGCG TGACGCACGT GATAGTGGG GAGGATCCCT 240
GCTACAGCGC CGGCGCCCTT CTGGCCATGG GCATGCTTGC GGGAGCCGCC ACTGGGGCGG 300
CGCTGGGCTC GTCATGTGG TCGCCCTGCT GTTCTTGAGC CCTGGGACTC GGAGCACTGA 360
CCCTGCGCT TGGATTGCTA GACTCCTCTT CCTCTGGAC CCCATCCTCT CGAG 414

```

(2) INFORMATION FOR SEQ ID NO:652:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:652:

```

GAAGGAAAAC ATGGGCACAG GGGATTTTAT CTGCATTTC ATGACTGGAG GGGCGCCCTG      60
GGGGTTCAGA TTGCAAGGTG GCAAGGAGCA GAAGCAGCCC TTACAAGTTG CAAAGATTCTG      120
AAATCAGAGC AAAGCCTCTG GGTCTGGGCT CTGTGAGGGA GATGAAGTGG TTTCCATCAA      180
TGGCAACCCT TGTGCAGATC TCACCTACCC TGAAGTCATC AAGCTCATGG AAAGCATAAC      240
AGACTCTCTC CAAATGCTCA TCAAAAGACC ATCCAGTGGA ATAAGTGAGG CTTTGATATC      300
TGAAAATGAA AACTCTAACC TCGAG                                     325

```

(2) INFORMATION FOR SEQ ID NO:653:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:653:

```

GAATTGCGCC TTCATGGCCT AGGTATTTAG GCTTTTGTCT TAACAGCAAA TCCTGGCTGT      60
CTGGGGCCTG ATGACTGTGT TCCATGGGTA TCCACTCCCT GTCCACAGTG TGGGAGCCCC      120
TCAGCTGCTT ATTGCAGGGA CACAGAGCCC GGCATGGTCC AGAAGGCGGG CTTATGGGGC      180
CTGCAGCACA CAGGGAAAGT GAGCCCACAC TGTGATAGGA GGGCAGACAC ACAGGATGTG      240
TTCTGTGTTA CAGGGTTGCC GTGAAGAATT TCATTCTTTT GCAAGGACTG GAGAGAAAAT      300
TTTATGTGGA AGGTAGCCCT TGGAAATGAC CTCAAAGAAT AGGTAGGATC TTAGCCTGCG      360
TTTGAAAGCC TGGAAAAAAA CAGGATGACA GGATGAAGAG GCCACAGCAC AGCTGCAGAC      420
AATGGGAGTG CGGAGATCTC GAG                                     443

```

(2) INFORMATION FOR SEQ ID NO:654:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:654:

```

GGGAGCGCCG GTGGTTCATC CTGACCGATA ACTGCCTCTA TTACTTTGAA TACACAACAG      60
ATAAGGAGCC CAGGGGAATC ATCCCGTTGG AAAACCTCAG CATCAGGGAG GTGGAGGACC      120
CCCGGAAACC CAACTGTTTT GAGCTCTACA ATCCCAGCCA CAAAGGGCAG GTCATCAAGG      180
CCTGTAAGAC GGAGCCGAC GGCNGCGTGG TAGAGGGGAA CCATGTGGTG TACCGGATCT      240
CAGCCCCGAG CCCGGAGGAG AAGGAGGAGT GGATGAAATC CATCAAAGCC AGTATCAGCA      300
GATCCCTCGA G                                     311

```

(2) INFORMATION FOR SEQ ID NO:655:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:655:

```

GGGGGATACG GATACCCAAA CTTCAATGTT CCTTGATAGT AGGAAGGAGG ACAGTTATAT      60
AGACCATAAG GTGCCTTGCA CAGATTCACA AGTGCAGGTC AAGTTGGAGG ACCACAAAAT      120
AGTAACTGCC TGCTTGCCCTG TGAACATGT TAATCAGCTG ACTACTGAGC CAGCTACAGG      180
GCCCTTTTCT GAAACTCAGT CATCTTTAAG GGATTCTGAG GAGGAAGTAG ATGTGGTGGG      240
AGATAGCAGT GCCTCAAAAG AGCAGTGTAAG AGAAAACACC AATAACGAAC TGGACACAAG      300
TCTTGAGAGT ATGCCAGCCT CCGGAGAACC TGAACCATCT CTCGAG      346

```

(2) INFORMATION FOR SEQ ID NO:656:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 116 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:656:

```

GAATTCGGCC AAAGAGGCCT ACTAAACCGT CGATTGAATT CTCGAGGCAG GTCTAGAATT      60
CAATCGACGG TTAGGCTCC CTATAGTGAG TCGTATTAAT TTCAGAGGTG TATTTA      116

```

(2) INFORMATION FOR SEQ ID NO:657:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 482 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:657:

```

GAATTCGGCC AAAGAGGCCT AGGGATGAGG GTGAAGAAGG GGAGAGGGTT GGTAGAGAT      60
ACAGTGTGGG TGGTGGGGGT GGTAGGAAAT GCAGGTGAA GGGAAATTCTC TGGGGCTTTG      120
GGGAATTTAG TCGTGGGTG AGCCAAGAAA ATACTAATTA ATAATAGTAA GTTGTTAGTG      180
TTGGTTAAGT TGTTGCTNGG AAGTGAGAAG TTGCTTAGAA ACTTTCCAAA GTGCTTAGAA      240
CTTTAAGTGC AAACAGACAA ACTAACAAAC AAAAATTGTT TTGCTTTGCT ACAAGGTGGG      300
GAAGACTGAA GAAGTGTTAA CTGAAAACAG GTGACACAGA GTCACCAATT TTCCGAGAAC      360
CAAAGGGAGG GGTGTGTGAT GCCATCTCAC AGGCAGGGGA AATGTCTTTA CCAGCTTCGG      420
TGGCTGGCAC GTGTACCAG GCCGAGTGGG ATGACTATGT GCCCAAACG TACGAGCTCG      480
AG

```

(2) INFORMATION FOR SEQ ID NO:658:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 430 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:658:

```

GAATTCGGCC AAAGAGGCCT AGTCGAGTCC CTTCTGTCCC AGTCGTTCTG GCCTCTTGTC      60
CCACGCAACT CCAGCTTGTA CCATGCCGGT CAAAGGAGGT AGCAAGTGCA TCAAATACCT      120
GCTCTTCGGA TTAACTTCA TCTTCTGGCT CGCTGGCATT GCAGTGCTTG CTATTGGACT      180

```

ATGGCTCCGA	TTCGACTCTC	AGACCAAGAG	CATCTTCGAG	CAAGAGAATA	ACCATTCCAG	240
TTTCTACACA	GGAGTGTACA	TTCTGATTGG	AGCCGGGGCC	CTCATGATGC	TGGTTGGTTT	300
CCTGGGCTGC	TGTGGAGCTG	TACAAGAGTC	CCAGTGCAATG	CTGGGATTGT	TCTTCGGGTT	360
CCTCTTGGTG	ATATTGCGCA	TTGAGATAGC	CGCCGCCGTC	TGGGGCTATA	CCCACAAGAG	420
TCGAGTCGAG						430

(2) INFORMATION FOR SEQ ID NO:659:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 290 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:659:

GAATTCGGCC	TTCATGGCCT	AAGAGTACAG	AGATTTCACT	TCATCTTGTG	CTAATGTTTA	60
ATTNAAAGTA	TATTGACACT	AGTAAGACA	CTTTATTTTA	ATTTGAGGTA	TAAATGTCTA	120
CCTAAAATAG	ACTATTTCCA	TTGAGTCATA	CATTTTAAAT	GTGGTATATA	TTCTTATATT	180
TCAGAAAATG	ATACTATCA	TAGAAATCTA	ATACTCATT	ATTTGATTAA	TAATTATTTT	240
TTTCCTCAA	TTTGAAATA	TCTTTTCTA	TGTAATGGTC	ATGTCTCGAG		290

(2) INFORMATION FOR SEQ ID NO:660:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:660:

GAATTCGGCC	TTCATGGCCT	AGTCAGAAGT	CTTTGTGTCC	CTGTTTTTGT	GTCCATTTC	60
TGTACCTTGG	CACITTAAGG	CTTGCTCTGC	AAAATAAAAC	ATTGCATCAT	CACTTGTGAA	120
GGCAGAGCTT	GGGAGTTTGC	ACTGCTAAGA	TGAGGATAGG	AAAGAAATTT	ATGCCGCAGG	180
GCCTTTGATG	CTGCCCACTC	ACCTGTCTGC	ACAGCCAGGG	CACGCCAGC	GGGAGTGGAG	240
AAGACGAGCG	AGACCAAAAC	CTTGCCGTGG	GGAGGAGGGT	GGCATAGCCA	TTGATAAATC	300
GGGACTTGAA	CTATCCCATC	ACTCTAAAAA	TATTTTTTAT	CTGATTACAA	AAGTAATAGA	360
TGGCCAGGCA	TGATGGCTCA	TGCCTGTAAT	CCCAACACTC	CTCGAG		406

(2) INFORMATION FOR SEQ ID NO:661:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 461 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:661:

GAATTCGGCC	TTCATGGCCT	AGTGGAAGT	AAAACCTCAGA	GGAGGCATCA	AACCCAGGCT	60
TGGGGGACAA	AACTAAGTCT	TGCCAGAGTC	CTGAAGGATG	AACAACAGTT	AACCAAGCAA	120
GGGATACTGG	AGGGCATGGA	GGCTCTCTGG	CCTGGAGTGC	AGAGCATGGA	GTGCTCAAAG	180

```

AGCTAGTTAG CTCTGCAAAG CTGAGTGTCA GGAATGTAAA GGGAGAGAAT AGGAGTGAGA 240
GAAGAGTCTG GCAAGGCAGA CAGGGAAGGC CTATATGCCT TGATGGAGAA CCACTGAAGG 300
ATTTAAAGAA GGAGAGGGTT AATTTTGTCC AATAGAAAGA TCACATTGTG TGTAGTGTGG 360
AGGATGGGTT GCAGAGAGAG AAGCTAGAGA CCAAAAGATG AGACGGGAAC AGCTGCAAAT 420
TTCGAGAGCT CGTAAGATTA TGTATGGCTG GACCACTCGA G 461

```

(2) INFORMATION FOR SEQ ID NO:662:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:662:

```

GAATTCGGCC TTCATGGCCT AGCCTGAGCT CAGGAGTTCA AGACCAGCCT GGGCAACACA 60
GTGAAACTCC ATCTCTACTA AAATACATAA AAATTAGCTG GGCCTGGAGG CATGCACCTG 120
TGGTCCCACT GCTACTGGGG AGGCTGAGGC AGGAGAATTG CTTGGGCCCC GGAGGCAGAG 180
GTTGCAGTGA GCCAAGATCG CGCCACTGCA CTCCAGCCTG GGCAACAGAG CGAGACTCCA 240
TCTCAAACAA ACAACAACAA AAACAACAA ACAAAACAAC AGTTATTTTT TTCTCACCAT 300
TCTAAAGAAT GTTACATTG ATTCTTTTC AAAATTGGT CAGTTTTGAT AGTCTTATTT 360
CTCCATACTT TCATTCCCC TTTTATTTC TGTAAATAAT TGAACITTAT ATTCCTTATA 420
TGATAATTTT AATATCCAAA GTCATTGGTC ATATTCTCCA GTTCATGATT TCTGCTGAGT 480
TTGTGGTGCT GATTTTCTCG AG 502

```

(2) INFORMATION FOR SEQ ID NO:663:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:663:

```

GAATTCGGCC TTCATGGCCT ACAACCACCA ACATTTGTGT TTTGTCAGAT GAACAGGTTG 60
ACAGAAGTCC CACTGGCTCA GGAGTGACAG CCCGAATTGC CTTACAGTAT CACAAAGGGC 120
TTCTGGAACT GAACCAGATG AGAGCCTTCA AAAGCAGTGC AACTGGCTCA GTATTCACAG 180
GGAAAGCTGT GAGGGTAAGT GGCACCCTTA GCTTCTTATT TATAAATGTG TCACTCATGA 240
GACTGGAGAG GCCTGAGTTG GGTGTTGAT AAATTCTTC ACTCAGCTCT CAGAAGAGAA 300
TTTTAAAGCA GGCCTGTAAA AACTTCTTTT CAACTAGGAC ATTGGTTATC CAGTGTGGTC 360
TTGGGGCCCC AGCGGGCCCC TAAGGTCCTT TCCATGGGTT CAGAGGGTCA AAAGTGTGTT 420
CATAATAATG ACATTATTG CTTTCACTC TCATTCTCTC AAGAGTGATC AGTGGGTTAC 480
TCGAG 485

```

(2) INFORMATION FOR SEQ ID NO:664:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:664:

GAATTCGGCC	TTCATGGCCT	AAAAATTATA	AAGTGTAATA	TATCTTTGTA	TCTCTAGTTT	60
TTCTCCTTTC	CCCAGATAAG	AATAAAAGCA	GGCTGCAGGC	TCCTGGGGTG	ATAACCCACT	120
TGGGTCGAGT	TCCATCGCTG	TTGGCGATAA	ATCTTGTGTG	TGTTCACTTT	TTGGGTTCTC	180
ACTACCTTTA	TGAGCTATAA	CACTCACCT	GAAGGTCTGC	AGCTTCACTC	CTGAAGCCAG	240
CGAGAGTACG	AACCCACAGG	CAGGAAGAAA	CTCTGAACAC	ATCCGAACAT	TGGAAGAAGC	300
AAACTCCAAA	CAAGCCGCTT	TTAAGAACTG	TAACACTCAC	AACTCGAG		348

(2) INFORMATION FOR SEQ ID NO:665:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:665:

GAATTCGGCC	TTCATGGCCT	AGTCGTTATC	AGAGGTGGAG	ACATTTAGAA	GTTGTTCTTA	60
ATCAGAGTGA	AGCTTGTGCT	TCGGAAAGTC	AACCTCACTC	CTCAGCACTC	ACAGCACCTA	120
GCTCTCCAGG	TTCTCATGG	ATGAAGAAGG	ACCAGCCAC	ATTTACCTC	CGACAAGTTG	180
GCATAATATG	TGAGCGCTC	TTAAAGACT	ATGAAGATAA	AATTCGGGAG	GAGTATGAGC	240
AAATCCTCAA	TACCAAACTA	GCAGAACAA	ATGAATCTTT	TGTGAAATTC	ACACATGATC	300
AGATTATGCG	ACGGTATGGG	ACAAGGCCAA	CAAGCTATGT	GTCATGAAGC	TTTGTACAT	360
ATCTGGGTAC	CAGGTTTGAC	CTCAAGAGAT	GGCTGCTGTA	CACTTTTTCG	AACTGGTTTG	420
ATGTCACATT	TCAGCTCCAA	CTTTGCATCC	TGAGAACACT	TAAACGTTTC	TGCAGGTCCA	480
TTTTATACAA	CTTGAAAGAC	CGTAAACTTT	TCTGGTTGCC	ACAAGCATAT	CTTTCTTTTC	540
TGCTCATCCA	ATAAACAGCT	GAGCCCTCGA	G			571

(2) INFORMATION FOR SEQ ID NO:666:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:666:

GGGATCATT	TTATTCAGCT	ACTGAGAACT	AGAATATTAA	GAGACTGCTG	GCAAGGCAAG	60
CAGTTAATTT	TCAGTTGAAA	TTGCATTAAA	TAAAAAGTAT	TTTCTTGCTT	TGTGGAAGCA	120
CGTGAATTTT	TGTAAAAAGC	TGCTTGTTTT	CCCCATTAC	AGGTTCTGTA	CAGAGTAATG	180
AGATGTGTGA	CGGCTGCAAA	CCAGGTGTTT	TTTTCTGAGG	CTGTGTTGAC	AGCTGCTAAT	240
GAGTGTGTTG	GTGTTTGTCT	CGGCAGCTTG	AATCCTAGCA	TGACTATACA	TTGTGACATG	300
GTCATTACAT	ATGGATTAGA	CCAAGTGGAG	AATTGCCAGA	CTTGTGGTAC	CAATTATATC	360
ATCTCAGTCT	TGAATTTACT	CACGCTGGTA	TGTGAATTAT	TCTTTTCCTT	TTAATGTGT	420
TGTTTATTC	AGGCCATCT	CGAG				444

(2) INFORMATION FOR SEQ ID NO:667:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 524 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:667:

```

GGGAAGTAC AAGCAATTAA CTGGAGAATA AGTGAGGGGA ATGGAGCAGT AGTATTCTTT      60
AACTTAATTT GCCATTTAAG AGAGCACTTG GAATCTGAAG AAAGTCTATC CCTACCAAGG      120
AAACGGAGTC AAATTGCAAT TAAGATTAACT TTTGGTTATA TGGAGCAAG AATCATGCTT      180
CTCATCATCA ATTGCGTCTC TTTGGTAGCC AATAATTCCA TCTGTAATCA TGGCAGCAAC      240
TTAAGTATTG CCAATGTTTT CAAATGTGTT ACAGCATTAA GGCATCCACA TCTAAAGAGG      300
CAGTTTTAAA CAAGAGGAAA ACGGAAGTGA AATGTGCCAA GAAGTGAACA CGGACATGGC      360
CTCTCCTGGA ATACTGCCCA CCATGCCAGC AAGCTCTTCC TCCAGTCAAG AAGGCCTGTG      420
CCACGCTGCT TGGTCCCTG CTGCCTGAAG ATGCATTTGA GCCCTATGAG ATTAGTATGG      480
CTATTTCTGT CTGCTGACCA GGAGAGAAAT GAGTAGTTCT CGAG                      524

```

(2) INFORMATION FOR SEQ ID NO:668:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 554 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:668:

```

GAATTCGGCC AAAGAGGCCT ACACAGAGGG ATAATTGGCA TTGGTATCAA CTGACATATT      60
CACAACTTTG AATAAACTT TCCACATTTG GAAAATCACC ATGCCTGGCC CCTAGGCTAT      120
ACTTTGAAAA CCACTGCTTT AGTGTTTTAG AAATTGTTAC CCTCATACTA ATATTTACTA      180
CACCCCCCAC CTTGACAATA CATACAAAAG AGGAGTAACA GTTCCCATTA ACCTTTCTAA      240
ATTTGAGTCT TATTAAACCA GACTCATAGC CCTTGTGAC TTTCTTCCTT GATCTGTGCC      300
TTATCCCTAG GCGCGTGATC ATGCGGGTAT CTGCTAATTG GCAGATGTGA GTGGTTATAC      360
CTATTTACAA GCAACTCATT GCAAAAATAA TTTTAGCTAA AGAAAACATC CATGGCCAGA      420
GAATAAGTTT TGAATTTGA TATGTTAAAT GAGCTTTATG TTTACCTTTA AAAGGTTAAA      480
ATATTTACCA TTCATGGATT ACCTTTTTC AGAAAGTAAG AATATATAAA TTACATTAA      540
TCTTGAAGCT CGAG                      554

```

(2) INFORMATION FOR SEQ ID NO:669:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:669:

```

GAATTCGGCC TTCATGGCCT AATCGTATTC CATCTACTGC ATACTTTTCA TAGATGTCCT      60
CCATCAGAAG CACCTATGGT TGTTTGTTAA ACGTGTTATT TCCTGATCCC ACCCCAGGAT      120
TTCTGAGTAT TCTAAGAATT TCTAAGTGTA AGGCCTGGAA ATATGCATTT TACAACCCCC      180
TAGAACATTC TTATGTGCAC TAAATTTGA GAACCACTAA TCTGGTGTAT ATACTGTTGT      240
TACTTAATAT TTTCTTAATG ATAGATACTT GGATGATTTT TGACTTTATT ATTATTATAA      300
GCAATGTTGT AAACATCACA CAGGCCAAG                      329

```

(2) INFORMATION FOR SEQ ID NO:670:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 267 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:670:

```
GGCGTATGAT ACCTAAAGTG GAGTGGTCGG CGTTCCTGGA GCGGCGCGAT AACTTGCCTC 60
TGATCCAGGT GCCGAAAGGG CCGGTTGAGG GATATGAGGA GAATGAGGAG TTTCTGAGGA 120
CCATGCACCA CCTGCTGCTG GAGGTGGAAG TGATAGAGGG CACCCTGCAG TGCCCGGAAT 180
CTGGACGTAT GTTCCCCATC AGCCGCGGGA TCCCCAACAT GCTGCTGAGT GAAGAGGAAA 240
CTGAGAGTTG ATTGCACCAG ACTCGAG 267
```

(2) INFORMATION FOR SEQ ID NO:671:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 429 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:671:

```
GAATTCGGCC TTCATGGCCT ATTATCTCTC AAAAACAAAG CAATAAGTAC CAAGAAATAG 60
CAACAAAAAT TAGCTTGTA GGTGGTTTC TGAGGGTAGA AATGGCTCTT GATGCCATGT 120
GGAGCAATGG GAAGGAGGCT TTCTAGTTAC ACAGACTCTT GGTCCTGCCA CTTATTCAAT 180
TTATTTTATT TTATATTTTA CTTTAAATTT TTTGAGATAG GGTTCACCCC TGTCGCCCAG 240
GCTGGTGGGC AGTGGCTCAC TGCAGCCTCG AACTACCAGG CTGAAGTGAT GCTCTTACCT 300
CAGCCTTTCG AGTAGTTGGG ACAACAGGTG CACACCACCA TTCCTGGCTA ATTAACAAAA 360
TTTTTTTGTG GGAACATGGC AAGACCTTGT CTCTATTAAC AACACAGCA ACAGCAACAA 420
CAACTCGAG 429
```

(2) INFORMATION FOR SEQ ID NO:672:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 357 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:672:

```
GTAAATCGT TCTTGAGAGG AACGTCTCTG TCGGAAGAGA TAATGAGTTT AGCTCTGAGA 60
AGTGAGCTTG TAGTGGACAA AACAAAGAGG AAAAAAGAA GAGAACTGTC TGAGGAACAG 120
AAACAAGAAA TTAAAGATGC TTTTGAACCTA TTTGATACAG ACAAAGATGA AGCAATAGAT 180
TATCATGAAT TAAAGGTGGC AATGAGAGCC TTGGGGTTTG ATGTAAAAAA AGCTGATGTA 240
CTGAAGATTC TTAAAGATTA TGACAGAGAA GCCACAGGGA AAATCACCTT TGAAGATTTT 300
AATGAAGTTG TGACAGACTG GATATTGGAA AGAGATCCCC ATGAAGAAAT ACTCGAG 357
```

(2) INFORMATION FOR SEQ ID NO:673:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 292 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:673:

GGTAGATACT	GGTTTTTCGT	ATCCTGCTTC	TCTTAAGGGC	AGCTCTTTTT	AGCATACTCC	60
CATGCAGCAA	CAGAAATTTG	TATCTTTTTT	TTCTTTTTTG	AGATGGAGTC	TCGCTCTATC	120
ACTAGGCTGG	AGTGCAGTGG	CACAATCTCG	GCTCACTGCA	ACCTCTGCCT	CCTGGTTCAA	180
GCGATTCTCC	TGCCCTAGCC	TCCTGAGTAC	CTGGGACTAC	AGGTGCGCGC	CACCACACCC	240
AGCTAATTTT	TATATTTTAA	GAGAGACGG	GGTTTACCA	TGTGGCCTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:674:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 470 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:674:

GGATGGACAT	CAGCACTTTA	CGGCGCCAGC	TGAGACCCAC	AGGCCAGCTC	CGTGGAGGGC	60
TCAAGGGCTC	CAAGAGTGAG	GATTCGGAGC	TGCCCCCGCA	GACGGCCTCC	GAGGCTCCCA	120
GTGAGGGGTC	TAGGAGAAGC	TCATCCGACC	TCATCACCCT	CCCAGCCACC	ACTCCCCCAT	180
GTCCCACCAA	GAAGGAATGG	GAAGGGCCAG	CCACCTCGTA	CATGACATGC	AGCGCCTACC	240
AGAAGGTCCA	GGACTCGGAG	ATCAGCTTCC	CCGCGGGCGT	GGAGGTGCAG	GTGCTGGAGA	300
AGCAGGAGAG	CGGTGTTGG	TATGTGAGGT	TTGGGGAGCT	GGAGGGCTGG	GCCCTTCCCC	360
ACTATTGGT	GCTGGATGAG	AACGAGCAAC	CTGACCCCTC	TGGCAAAGAG	CTGGACACAG	420
TGCCCCGCAA	GGCAGGCAG	AACGAAGCA	AGTCAGACAT	CCAACCTCAG		470

(2) INFORMATION FOR SEQ ID NO:675:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 637 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:675:

GAATTCGGCC	AAAGAGGCCT	AGTCGCTCTT	GCTGAAACCT	TCAATGCAGT	GAGCGCCCAT	60
CTCATTGGGA	CCTACAGGCT	GAAGTTCTTC	CTCTGATGGA	CATGACCCCC	GTGTTGTCTC	120
TAATAACCTC	ACTTTCACCT	TGTTCCAGCC	ACACGGGGTT	TCTGTCTTTC	TCGGGTCATG	180
TCGGGCTTAT	GTGCCTCGGG	CCCTTTGCTC	ATGCTGTTCT	CTGCCTGGGA	TGCGCTTTAC	240
TGGGTGCCAG	GATGGTCAGT	GATTCCATTT	CTCTCAGAGT	CTATTCACAG	GTCCCTTTCT	300
CGGTCACGCC	TTCTCTGGCT	CCACTGTCTA	AAATTTCAAC	AGCTGCCTCT	GCCCCCGGAA	360
CTTCATATCC	CCCTTATCTG	CCTTTTTTCC	TTCAGCTCTT	ACTTCCATCA	AATACAGTAT	420
GTATTTTAA	AAGTCTTATC	TGTTTCACGG	TCATTTTCTT	CCACAGGTAA	TTTTGGTAAA	480
CTTTGTAAGA	TTGATGATGT	TTAATACTGT	TTTGTTTAAT	ACAGTACCCC	CAGTTTAGCA	540
CACAGCTTTT	GAATGAATGA	CCAGTTTTTA	TTCCCTCTG	AAGCGCTAAG	AGCTGCCGCT	600
GAGGTGGCAT	CTGTAGCNGC	TCCCGCTCCA	ACTCGAG			637

(2) INFORMATION FOR SEQ ID NO:676:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:676:

GAACACGTCA	TGAGGAAGGA	GCAGCGCAAG	GAGGAGAAGG	AGAAGCGGCG	CCTCGACCAG	60
CTGGAACGTA	AGAAGGAGAC	GCAGCGCCTA	CTGGAGGAGG	AGGACTCCAA	GCTCAAGGGC	120
GGCAAGGCGC	CGCGGGTGGC	CACGTCCAGC	AAGGTCACCC	GGGCCAGAT	CGAGGACACG	180
CTGCGCCGAG	ACCATCAGCT	CAGGGAGGCC	CCGGACACAG	CCGAGAAAGC	CAAGAGCCAT	240
CTGGAGGTGC	CGCTGGAGGA	GAACGTGAAC	CGCCGCGTGC	TGGAGGAGGG	CAGCGTGGAG	300
GCGCGCACCA	TCGAGGACGC	CATTGCAGTG	CTCAGCGTGG	CGGAGGAGGC	GGCCGACCGG	360
CACCCAGAAA	GACGCATGCG	GGCAGCCTTC	ACAGCCTTTG	AGGAAGCCCA	GCTGCCGCGG	420
CTCAAAACAAG	AGAACCCCAA	CATGCGGCTG	TCGCAGCTGA	AACAGTGCT	CAAGAAGGAG	480
TGGCTCCGCT	CTCCTGACAA	CCCCAACTC	GAG			513

(2) INFORMATION FOR SEQ ID NO:677:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:677:

GTCCATCCTG	AGCTCCATGG	AGAAGGCCACC	CAGCCTCGGT	GACCAGGAGA	CTCGGCGCAA	60
GGCCCGAGAA	CAGGCCGCC	GCCTGAAGAA	ACTACAAGAG	CAAGAGAAAC	AACAGAAAGT	120
GGAGTTTCGT	AAAAGGATGG	AGAAGGAGGT	GTCAGATTTC	ATTCAAGACA	GTGGGCAGAT	180
CAAGAAAAAG	TTTCAGCCAA	TGAACAAGAT	CGAGAGGAGC	ATACTACATG	ATGTGGTGGA	240
AGTGGCTGGC	CTGACATCCT	TCTCCTTTGG	GGAAGATGAT	GACTGTGCT	ATGTCATGAT	300
CTTCAAAAAG	GAGTTGCAC	CCTCAGATGA	AGAGCTAGAC	TCTTACCGTC	GTGGAGAGGA	360
ATGGGCCCCC	CTCGAG					376

(2) INFORMATION FOR SEQ ID NO:678:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:678:

GAATTCGGCC	TTCATGCCTA	GCAGGAGGTT	TTATTGTAAA	GAGGCCGATT	GTACAGAGCA	60
AAGATTGTTT	TGACACGGGG	GGCTGGGTGG	TGGGACCCAG	AGGCCAGAGC	TGGGTGAAGG	120
ATGAGGGGTG	GCATCGCCCC	ATCCAGGCAG	TGGGCAGGGC	AGGGAGGACT	AAACGGCTGC	180
CTCCAGTTT	CCTTCCCTGC	CCCTCATTAC	TGGGTAAGAG	GGAGCCAGGC	TATTTCCACG	240
GATCCAGGAG	AATATAGCAG	GAGACCCTCA	CCACCCACA	CCATGCCCCA	AGGATACGGG	300

AGGTGCCCCA GTCTGGCTTT TGCAGTCGGC CAGCTCCCAG CCTCCTCGAG

350

(2) INFORMATION FOR SEQ ID NO:679:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 357 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:679:

GAATTCGGCC	TTCATGGCCT	AGTTCTCACC	GGGGAAAAAC	CCACTGTTAG	GATGGCATGA	60
ACATTTTCCTT	AGATCGTGGT	CAGCTCCGAG	GAATGTGGCG	TCCAGGCTCT	TTGAGAGCCA	120
TGGGCTGCAC	CCGGCCGTAG	GCTAGTGTA	CTCGCATCCC	ATTGCAGTGC	CGTTTCTTGA	180
CTGTGTTGCT	GTCTCTTA ^a	TTAACCGTGC	TGAGGCTCCA	CATAGCTCCT	GGACCTGTGT	240
CTAGTACATA	CTGAAGCGAT	GGTCAGAGTG	TGTAGAGTGA	AGTTGCTGTG	CCCACATTGT	300
TTGAACTCGC	GTACCCCGTA	GATACATTGT	GCAACGTTCT	TCTGTTATTC	CCTCGAG	357

(2) INFORMATION FOR SEQ ID NO:680:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 250 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:680:

GGGGGTGGAA	GGCGTAGTGC	TTGAAATGCA	GGGATCTGGC	AGTCAGCAGA	AGGATCTGAG	60
ACCCAGTGTC	GAGGTTAAAA	AAAAACAACA	AAACCAAAAA	CCAATGCAGG	AATCCAGTGG	120
GTGGAGTGAG	GGGATCTGGG	ATCCAGTGAT	GGGGGCCCCA	GGATCCAGGC	ATTGTGGTTG	180
TCAGGATCCA	GTGGTGAGGT	TTGTTGACAT	CCAGAATCCA	GCAGCTGAGC	TTGGAGATCC	240
AGGGCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:681:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 406 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:681:

GGATTCCTAC	AAAAATTGAG	GCAGAAGATC	AAAATCGGAG	TGGTAGGCGG	ATCGGACTTT	60
GAGAAAGTGC	AGGAGCAACT	GGGAAATGAT	GAATATTCAA	AGTCATCTGG	GTGAGGCCCT	120
AATCCAAGAT	TTAATCAACT	ACTGTCTGAG	CTACATTGCG	AAAATTAAAC	TCCCGAAGAA	180
GAGGGGTACT	TTCAATTGAAT	TCCGAAATGG	GATGTTAAAC	GTGTCCCCTA	TTGGAAGAAG	240
CTGCAGCCAA	GAAGAACGCA	TTGAGTTCTA	CGAACTCGAT	AAAAAAGAAA	ATATAAGACA	300
AAAGTTTGTA	GCAGATCTAC	GGAAAGAGTT	TGCTGGAAAA	GGCCTCACGT	TTTCCATAGG	360
AGGCCAGATC	AGCTTTGATG	TCTTCTCTGA	TGGATGGAAA	CTCGAG		406

(2) INFORMATION FOR SEQ ID NO:682:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:682:

```

GAATTCGGCC TTCATGGCCT ACCCTTCTAG GTGTCATCTC CTTCCCTCCC TTTCCCCCAA      60
GACTCCCTCT GGGCCCAGCC AGCAGGTGAA GCCTGACTTA GGAAGGGGG GATTTCAGG      120
GGAGGGGGCCC TGGCCCCAC TGACCCAGCA TTGCTATCCA CAGGAGGAGC AGCCCCACA      180
ACATCGATCC AAGAGGGGGG GCTCAGTGGG CGGCGTGTGC TACCTGTGCA TGGGCATGGT      240
CGTGCTGCTC ATGGGCCTCG TGTTGCCTC TGTCTACATC TACAGATACT TCTTCCTTGC      300
GCAGCTGTCC CTCGAG                                     316

```

(2) INFORMATION FOR SEQ ID NO:683:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:683:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCGGCCTCCC AAAGTGCTGG      60
GATTACAGGT GTGAGCTAGC ACTCCCAGCC GACAGGTGCT TCTTAAATGT TTTCTTTGAG      120
CAGGAATTGG TCCAGGAATT GGTCTCAAG TTAGAAGGAA AATTTGAGGG GAAGAACTTG      180
TTTTTTCTCC AATCAGTCTC TGATTAAATA GTTATTAGGA AAAACTCCTT GCTTATGTCT      240
TTGTATTGCA CATTTTATA TATGTATATA TGTGTAAATA GAGATATTTA TATATTCACA      300
GACAAACACG TGTATGCACA TTTCACAATG GAGGAAGAAG GGATATGGTG TGCATGAGG      360
TAAAGTGAGC AGGGATACAG AAGAGAACT CGAG                                     394

```

(2) INFORMATION FOR SEQ ID NO:684:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:684:

```

GTCCTAACCT TGGGTCCAAG TTTCGTTATA GTGGCAGGAC ACAAGCGCAA ACGAGAAGAG      60
CCAGTGCGTT GATAGATCGC CCAGCACCTT ACTTTGAACG CTCATCCAGC AAACGTTATA      120
CCATGTCTCG CAGCTTGGAT GGAGCATCAG TGAATGAAAA CCATGAAATA TACATGAAGG      180
ATTCTATGTC TGCTGCAGAG GTTGGTACTG GCCAGTACGC CACAACAAAA GGCATCTCTC      240
AGACCAACTT GATCACCCTT GTGACTCCGG AGAAGAAGGC TGAGGAGGAG CGGGACGAGG      300
AAGAGGACAA ACGGAGGAAG GGGGAAGAAG TCACGCCCAT CTCGGCCATC CGGCACGAGG      360
GAAAGACTGA CAGTGAGCGC ACGGACACCG CAGCCGACGG GGAGACCACC GCCACTGAGT      420
CGGACCAGGA GGAAGATGCA GAGCTCAAGG CACAGGAGCT AGAAAAAAT CAAGATGACC      480

```

TGATGAAACA TCAAACCAAC ATTCTCGAG

509

(2) INFORMATION FOR SEQ ID NO:685:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:685:

```

GAATTCGGCC TTCATGGCCT ACCAAAGTGC TAGGATTACA GGC GTGAGCC ACTGCGCCTG      60
GCCTCTTTCT TCTTTCTTGA ATTCTCTTCT TTTTATGTTC CTGGGAAAAT CCTACTCATT      120
TTATATGATT TGGCTGATGT AAAGCCACCA TTGTCTTCCT AAGCAGAGAG GGTCTTGCTT      180
TTGGGTGCTG CACAACCTTG TGCAATTTT CTGTTACATC ATTTATCTTT TGGGGATTGT      240
TTATTTTCAT ACTTATCTCT CTTCCAGGAC CATGTTAGGG AGAGGTGTTT TTAATTTTTA      300
CCTTTTCTGC AGCACTTAGC ACAGTGCCTA ATCATAGTAA ATATCACGTA AAAGTTGAAT      360
GAAGGAATGG ATGTTTGATA TAGAGTTAGG ACACCTGTGT CCAGGTCTGG CTTTGCTTTT      420
CCTTTNACCC CCCACCTCGA G                                     441

```

(2) INFORMATION FOR SEQ ID NO:686:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:686:

```

GAATTCGGCC TTCATGGCCT AGTTGGTTTA TGTTATGTAA AGTTATGTAG TTATGTAAAG      60
GTGCTGAAAT GTCACCTCTG TGATTATGTT TTATTATATA AGGCTCTATC TTAGCAAACC      120
AGGAGAGAAA TTCTCCTGAT GGCCTTGAAG AAGCAAACAG CCACCTGGTT AAGCCCCTGT      180
GGATAGTGCC AAGTGGCAGG AAAGTGGGAG CCACCTCTAG GACCTGAGGA TTAAAGTCAG      240
TAAGAGCTGG GACCTCACTC ATGCAGACTC GAG                                     273

```

(2) INFORMATION FOR SEQ ID NO:687:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:687:

```

GAATTCGGCC AAAGAGGCCT AGGGCTCTGG ATTTTGAGTT TCGGGCTCTA GATGGAATTG      60
AGAAGGTCCA ACTTGCTCAG AGGGCCCTGG AGGCTCATCT GACTTCACCC GGATTTTCCT      120
CGAG                                     124

```

(2) INFORMATION FOR SEQ ID NO:688:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:688:

```

GAATTCGGCC AAAGAGGCCT ATGCCATCTT AGTCCCTCTT CCCAACCCCA TTTTITAGTT      60
ACTTTCCTTT CATTAAAATA TCCTTATGCA CTTACAAATA AACTTAAGTC CCAAGAGGGC      120
AACAAAATAT AAGATTCTTA ATGATACAAA AACAAATCTT TCTGATACTA GATCTTTTAT      180
ACTAGAAAAA TAAATTCTTG TGCTTGAACA TCATTTTAA GCACTTAGTG AATTGAGAAT      240
CTGAACTGCC ACTTGAATA TTCCCGGAA AGAAACATTA TGAACCAAT GAAGGAACAT      300
AGCTATTCAA AGGGACATAT TTTGTACTT GTTTTGCTCC AATTCTGCT ACATAGACTG      360
CTCCAGTCTT TCTGTCGACT CTAGGAGATG CCTAAACCGT CGATTGAATT CTAGACCTGC      420
CTCGAG                                         426

```

(2) INFORMATION FOR SEQ ID NO:689:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:689:

```

GAATTCGGCC AAAGAGGCCT ATAGTTTTTT CATGTTACAT CTTTAGATT ATTTTCTTTT      60
TAATCTATCT GTGACTATAT TTAAAGTCAA TTCTTGTTTT TTCCTTTTCC TTTTGTGGG      120
TAACGGGGTC TCGCTGTGTT GCCCAGGCAG ATCTCAAACCT CCTGGGCTCA AGCTGTCCTC      180
CCACCTCTGC CACCCTAGGC TCGAG                                         205

```

(2) INFORMATION FOR SEQ ID NO:690:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:690:

```

GAATTCGGCC AAAGAGGCCT ACGTTGATTG AGCACTGAGC CCTTACTACG TGCTAGGCAT      60
GGTACATGCA TGGCCTTATT TAATCCTATC AACCTCGAG                                         100

```

(2) INFORMATION FOR SEQ ID NO:691:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:691:

GAATTCGGCC	AAAGAGGCCT	ACATCATACA	AGTCGTCGTA	AAGCAAATCT	GAGCTGTTGT	60
CATTGGAAGG	CACTTTAGTT	TTGATGCAGT	ATTCCGCCAG	GGTTGTGGGG	ACCTTCACTC	120
CATCCTTTTC	TGCTTCGGCC	TTAGTGGCTG	AAACTTGTTT	CCTAATAATT	TCAGCATATT	180
CTTTGTCTTT	TCCTTTACTG	TCTCTCCATT	TCCTGAACAT	AACTGAAGCA	TCGACATTGG	240
CTGGGGAGAA	GGTGTGGGC	TCATTAAGCA	GTGAGATTAC	ACTTAATAGG	ATAGTCTCTG	300
AG						302

(2) INFORMATION FOR SEQ ID NO:692:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 662 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:692:

GAATTCGGCC	AAAGAGGCCT	ACCAAATACC	AGGCTACCAT	GGTCTACAAG	ACTCTCTTCG	60
CTCTTTGCAT	CTTAACTGCA	GGATGGAGGG	TACAGAGTCT	GCCTACATCA	GCTCCTTTGT	120
CTGTTTCTCT	TCCGACAAAC	ATTGTACCAC	CGACCACCAT	CTGGACTAGC	TCTCCACAAA	180
ACACTGATGC	AGACACTGCC	TCCCCATCCA	ACGGCACTCA	CAACAACCTG	GTGCTCCCAG	240
TTACAGCATC	AGCCCCAACA	TCTCTGCTTC	CTAAGAACAT	TTCCATAGAG	TCCAGAGAAG	300
AGGAGATCAC	CAGCCCAGGT	TGCAATTGGG	AAGGCACAAA	CACAGACCCC	TCACCTTCTG	360
GGTTCTCGTC	AACAAGCGGT	GGAGTCCACT	TAACAACCAC	GTTGGAGGAA	CACAGCTCGG	420
GCACTCCTGA	AGCAGGCGTG	GCAGCTACAC	TGTCGCAGTC	CGCTGCTGAG	CCTCCACAC	480
TCATCTCCCC	TCAAGCTCCA	GCCTCATCAC	CCTCATCCCT	ATCAACCTCA	CCACCTGAGG	540
TCTTTTCTGC	CTCCGTTACT	ACCAACCATA	GCTCCACTGT	GACCAGCACC	CAACCCACTG	600
GAGCTCCAAC	TGCACCAGAG	TCCCCGACAG	AGGAGTCCAG	CTCTGACCAC	ACGACCCTCG	660
AG						662

(2) INFORMATION FOR SEQ ID NO:693:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:693:

GAATTCGGCC	AAAGAGGCCT	AAGCCCCCAA	AACACGCTCT	TTTGTGCCTC	CCCTCAAATC	60
CTTCACAGTG	TTCTTCCATA	TCCACTCCTT	CCAGGAAGCA	TGTTCTCACT	ACCCCAGTTC	120
ATGTGGGTTT	CTTCCCTCTC	AGAATTTCTA	TCATGCCCTT	ATAAGTTTAG	CAAATTGTCC	180
TTCTCTAATT	GTTTCACATC	TGTCCATCCG	ATATCCCAGG	AGGACTGTCA	GCTCTATGAA	240
GGCAGGGGTT	GTCTTTCTTT	TACCATGCCT	ACCATGCCTT	ATAGTGTTAA	TAAATTAACG	300
TACCCAGAAA	TGTTTCTCGA	G				321

(2) INFORMATION FOR SEQ ID NO:694:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:694:

```

GCGATTGAAT TCTAGACCTG CCTCAATCCC CTCCCTACTT GCTTTTCTT AGCATATAAA      60
AGTCCACAAG TTTTACTCAT CTTTTTAAAA AACGAAAACA TCCTTAGACC GTGTCCTCCA      120
TTAGTTGCTA TCCTGCCTTC TTCTCTCAGC TGAGCTGTCT GAAACATGCT AACATGCTTA      180
TACAATACTT GCTGTCCTGC CTTCTGCTCT CAGCTGAGCT CTCTGAAACA TGCTAACATG      240
CTTATACAAT ACTTGCTGTC CTGCCTTCTC CTCTCAGCTG AGCTCTCTGG AACATGCTTT      300
TTATACAATA CTTGCTGTCC TGCCTTCTTC TCTCAGCTGA GCTCTCTGGA ACTCGAG       357

```

(2) INFORMATION FOR SEQ ID NO:695:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 225 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:695:

```

GAATTCGGCC AAAGAGGCCT ATGGGTTTTT AAAAATTTTG TTTTATTTT TTCCTTTGAT      60
GTGCAGAGGC TGTTTACTTT GATGCAGTCT CACTTGTTTA TATTTTATTT TGTTGCTGGC      120
CTAGGCCTCT TTGGCCGAAT TCGGCCAAG AGGCCTAGTC GGGTGTGGCA GTGCCATTCT      180
GCAGTCCCAG CCACCGGGA GACCGAAGCG GGAGGATCAC TCGAG       225

```

(2) INFORMATION FOR SEQ ID NO:696:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 314 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:696:

```

GAATTCGGCC AAAGAGGCCT ATCCGCTTCT GTTGCAGCTG GCGGTGCTCG GCGCGGCGCT      60
GGCGGCCGCA GCCCTCGTAC TGATTCCAT CGTTGCATTT ACAACTGCTA CAAAAATGCC      120
AGCACTCCAT CGACATGAAG AAGAGAAATT CTTCTTAAAT GCCAAAGGCC AGAAAGAAAC      180
TTTACCCAGC ATGGGACTCA CCTACCAAAC AACTTTCTGT CGTTGTGCCT TCAACAATG      240
AAGAAAAACG GTTGCTGTG ATGATGGATG AAGCTCTGAG CTATGTAGAG AAGAGACAGA      300
AACGAGACCT CGAG       314

```

(2) INFORMATION FOR SEQ ID NO:697:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 353 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:697:

GAATTCGGCC	TTCATGGCCT	ACAGAGTGTG	GACGGCCAC	TGGGTGGTG	GTGGTGGTG	60
CCCGTCACAG	GGCTGGAGGT	GTGGCCGGCC	CACTGGGTTG	TGCTTTCTGC	CGTACGTCCC	120
TTCCCATGAG	GATGAGATGA	CCCATCTGTT	GCATCCCGGC	TGCTGATAAA	ACAAGACCCT	180
CGGAGCCAAG	AAACAACACT	GAGTTCCAGA	TTTCGGAAGG	TTCACGAGTG	TTGCCGACAC	240
GCCCTCCCAA	CTGCAGACAT	CCTCCCTGGA	GGACCTGCTG	TGCTCACATG	CCCCCTGTC	300
CAGCGAGGAC	GACACCTCCC	CGGGCTGTGC	AGCCCCCTCC	CAGGCCCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:698:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:698:

GAATTCGGCC	TTCATGGCCT	AGATTGACAG	AGGTCAGTTG	TCACTTCTTG	CCTCTCTCCC	60
CTTCCAGCAA	CATGTATAAT	CCTGTGAGTG	TTTCTTCAGC	ACCCTTCTCT	GTTGTTTACA	120
CTACTGCAAG	AGCCTCCGTA	AGTGGTCTGC	CTGTTTCCAC	CCTGTGTGCT	TGGAATTTAG	180
TTTCTCGCA	AAAGCCAGAG	AATGTTTCA	GAAGGTAGCT	CTTGAGCAAC	TTCCCACTTT	240
CTTGGAGGGG	AGATCCAGCT	TCCCCAACAA	GACCAGCAGG	CCCCTGTGCG	GCCTGGCTCC	300
TGTTCAACCCT	ACCAGTCTTG	GCTCAGGCTC	ACGGCTGGAA	TATGCCGAGC	TCTTTCTTGT	360
CCTGGGGCCT	TTGCACTTGG	CTTCCCTCTG	TCCAAAATCA	TCTTCCTGTA	GCTTTGTGCT	420
TGCCTAGCTC	ATCATCATAG	CAGCTCGAG				449

(2) INFORMATION FOR SEQ ID NO:699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:699:

GAATTCGGCC	TTCATGGCCT	ACAGAGAACT	GAGGAAAACC	AACTACGTGG	AGAATCTCAA	60
AGAAAAAAGC	GAGGGAGAAG	CTTCACTGTA	TGAAGATAGA	ATAATAACAA	GAGAGAAGGA	120
CATGAGGAGA	GTGAGAGATG	AGCCCGAGAA	GGTGGTGAAG	CAGTGGGACC	ATAGTGAGGA	180
TGAGAAAGAG	ACAGATGAGG	ACGATGAGGC	TTTGGGGGAA	GCTCTGCAGA	GCCCAGCAAG	240
CGGAAAGCAG	AGTGTGGAAG	CAGGAAAAGC	CAGAAGCGAT	TTGGGAGCAG	TTGCCAAGGG	300
CCTGTCAGGA	GAATTAGGCA	CAAGATCAAG	AGGGCTCGAG			340

(2) INFORMATION FOR SEQ ID NO:700:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:700:

```

GAATTCGGCC TTCATGGCCT AAGCCAAGCA AGGCTGTACC TTTAATTACT GCTGCCCTCA      60
TTTGCACTCTG GCTGCCCTCA TTATAGTGCT ATTAGCAGAG TGCAGGGGTC CTCCTGCTGG      120
CCCATCGGGA GTGGTGCGTG CACAGTTGTG GGGCCTTGCT TTGGTGGTCT TTGCTGCCTT      180
CTGGGCAAAA TGAAGGATTT GGAGTAGACA GCAAGCAGGC ATACATCCTG GGCCAGAAGC      240
AGCCTGCGGA GCTCATCGTG GCTTGCCTTA AATTGTTTCT CAACAATAAA GTTGTGAAA      300
AACAAATTTGT GTTTTCTTTC TCCTTATTAA AAACCCAAAA TTATATTCAT TATAGAAAAT      360
TAAAGAAGAT AGCTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:701:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:701:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCAGCCTCCC AAAGTGCTGG      60
GATTATAGGC GTGAGCCACC GCGCCAGCC GAAAATCTAA AGATATTGAA AAGATACAAA      120
GGAGCACATT ATGAACATTT TTTTCGTATC ACTGAGTATT TTATAACTGC ATCATTGATT      180
TTAAAAGAAT TCATGACTTT GAAAATAAT ATTCTACAAA GTAGCTTTTG ATTTAACATG      240
AGATTTTATA TATGTGCTTA TCTTGGTTCT CTATGAAACC CCATTGAAAT AAGAAAATGT      300
AAACACCAGC CAACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:702:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 549 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:702:

```

GAATTCGGCC AAAGAGGCCT AATAGTCAAG ACCTTTGCAG TTTTGATCAC AGAAATATGA      60
AAGATTACAC AGCTACAGCT ATATGAATGA TAAAAGTGAC AGCTATGGAT TTTTAAAGTT      120
ATAAGTTGCT ATACTACATA TATGTAATGT GTGTGTGTAT AGTGTGTAGG TATATATATT      180
TATATTTATA CACACACTAT ACATGTATTT TAAATATTG AAAATCCAGA ATTATTTTAT      240
GGTAAAAAAT ACTAAAATTG ACTTCACATG CTGAATGAAG AGAGCCTGAG TAGACCAACA      300
AACAAATGAA AAATTAAGAC GGTTAGAAGA TACGCTTTCT AAAAGAATAC ATTTAGAATC      360
TAACTTTAAA AAAAAAAAT CCTACTCTCC TGAGCCAGAG TGGTCTCAGA GAGACTCCGA      420
GAACCTAATT TTTTACAAGT AAAATCTTTG AAGAATTGGT AATTGCTAAA TTTTCCAAC      480
ATACTATTCT ACAAGACTAA CCTAAAAGT ATTATAAGAA CTAGGTGAGG AGGGCCGGA      540
AAACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:703:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 758 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:703:

```
GAATTCGGCC AAAGAGGCCT ATCGAGCCAC TGCACCTGGC CGATGTGTTC TGTTTGAAAT    60
CTTACTCAAA AGTATTTGAA GAGTTGTGTA TAGTTGTATG GATATGTCGT TAGTAAACAG    120
AAACAAATTG CTTCACTTTC TCTTTACTTA TTTTCTAGGT TACAGTACCT TTACCAGCAT    180
CCCAGCTTTC CTTGCCTAAT TTTGGATCTA CAGGGCAACC TCTAATTGCT TTGCCTCAGA    240
CTCTTCAGCC CCCATTACAG CATACCACTC CCCAAGCACA GGCTCAGAGT CTGAGTCGTC    300
CTGCACAAGT AAGCCAGCCT TTCAGAGGAT TAATTCCTGC TGGAACACAG CATAGCATGA    360
TTGCAACCAC CGGAAAAGTA AGTAAAGAGA CATTTCGACA GGTATTGGA GAATTTAAGG    420
TAGTGTGTTC AGATATATGC ATCTGTGTTA TCTAAAAAAC TAAAATGCGT CAGTTTTTAC    480
CACCTTGCAA AAATCTCAA CCCAGTATA TTTACATTTT ATCTATTTAC TTTTAATGTG    540
TTTGCCCCCA TCTAGTTTTT ACCTAATAAC AAAGAATTCA CAAATTTATT GGAAGAATTG    600
GATTTATAGT GTCTCTTTGG CTTATTTAAT TATAAGTCTG TTTGGTCAGG TAATTCCATA    660
ATACTGAAG CCTAACTATA GGAGTTTTGT ACTAAGGTTT TTTGCCCTTT CCTAGATTAC    720
GTCTTCACGT ATAGGACATG TAAACACAGC AACTCGAG                                758
```

(2) INFORMATION FOR SEQ ID NO:704:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 663 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:704:

```
GAATTCGGCC AAAGAGGCCT AAGATGGCCT TCCCATGTTA TGGCTACATG GCTGTGATAA    60
CAAGTAGAGT TATGTGTCTG CGCTCTAAAC TCACTGAGTC TTGCAGGATG TAAACATCCT    120
AGCTCAGCCT ATCCTTGACC AAAGCACANT CATGCTCCTT ACAAACTCCA ACCAGCCTGC    180
ACACTGGGAG GAGCGCGTGC TGGGCTAGAG CCACAGAATT TTGTACCGTT GGCAGCAGGG    240
AGGAGCCTGG CCCCTCCTTT CTTAGGTAGA ATCTGGAATT CAATCTGTGA GGTGGGAAGC    300
ATATACTAGG AGGACTTTCA CTCTGCTGAG TCCCTGTTCC CCCTCCCTTT TTTTCTCTTT    360
TTGCCCAATA AACCCCTTTA TTCTCACACT TCAAATTGTC TGTGAGACTA ATCTTTTGTG    420
GCCATGTGAC ATGGACCCTG TCTGTAGCTG AAATAAGAA AAAGCCCCTC CCGCACAGTC    480
TGATGTTTCC TCAGTCAGAC ACTGCAAGCT GTGATGTTGG GGTGAGTACA GGATATTGTTG    540
CAATATTTGC AGACAGTTTT GGCTGTCAGA GAGGAAGATG CTGTATGCAG ACACACTTGA    600
CAGCAATAAC TTAAGCCAC CCTGAGACTG ACTCTGCATG GTGATGCACC TGAAGGCCTC    660
GAG                                663
```

(2) INFORMATION FOR SEQ ID NO:705:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 334 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:705:

```
GAATTCGGCC TTCATGGCCT AGAGCGATGT CAAGTGATCT GCCCGCCTCA GCTCCCCAAA    60
```

```

GTGGTGGAAT TACAGGCGTA AGCCACTGCG CCTGGCCCCA AGTGTCATT TTTTAATTTA      120
GTAATTCTAA CCTAGGTATT TTTCCTGCAG TACAAAATGA GGATAAAGCT TTACATGAAA      180
ACATGTTGTT CCTATTATGT TTATTGCAGC AAAAACACAA CCTAAAAACC CAATCTGAGC      240
AGGTTTTAAC TAAATACTAA TAATTCTGAC ACTAGAACGT TATGTAGCTA ACAAAAATAT      300
GTCGTAAAAA TAATCATGTA GAAACTGGCT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:706:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:706:

```

GAATTCGGCC TTCATGGCCT ACCGAGCTTC AGAGCATCAG CAGTGTTCCT CCTTCACTGT      60
GACGCTTGTC CTCACCTCCC AGGTGAGGAG TCTAAGAAAA CAGCCTTTCC ATCAGCCCCCT      120
GTCGTGACAG ACCCTCCAGT GGGATGGTAG TGGCTGCCTC ACCCATTTAC AGGGCAACCC      180
AGTTTTGCTC CTTCTGCCTT GAAATTTGTT CCTCCAGAA ACTGTCCCTC ACAAGGCATG      240
ACAATCAAT AGAAGATATA CGTGGTCTTC CCAGCACTAC AGCTGCAGAA TGAGCTGTGG      300
AGTGCCCCGT CCGGAGTCCT GAACAGCTTC AAACCTTTCC CCTTTAGAAA TGCCTAACAC      360
GCCCTCGAG                                     369

```

(2) INFORMATION FOR SEQ ID NO:707:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 365 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:707:

```

GAATTCGGCC TTCATGGCCT AGGCATCCTT GGTGCGGCAT CCTGGTGCA TTATATCAGG      60
AGGCAAATGA TGTGGGTTTG TCCATTGTT TGTAATGGTA ACATTGGTTG CTGTTAAG      120
GTGAAGGGTG CCAAGCTTCT CCACTGTAAA GTTCCTATTT TTTCTCTGT AATTAATAAG      180
TAATTGTAT GATACTTTGA GATAACAAAG TAGACTGTTT ATCAAACTTT CATCAATGAA      240
TTTAACATCC AAAGACGCCT CAAGAATGAT CATCAAAAGC AGCCTACTAA TGACTGTCAT      300
TTACCATTTA ATACATTTCA AACAGTGCAC GTGCTCTGTG ACATATTCTG GGAAGGAATC      360
TCGAG                                     365

```

(2) INFORMATION FOR SEQ ID NO:708:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:708:

```

GAATTCGGCC TTCATGGCCT ACACAAAGCT TCTGGAGGAC AAACGGGAGC AGTTGAAGAA      60

```

```

GAGCAAAGAG CATGAGAAGC TGATGGAGGG AGAACTTGAA GCTTTGCGGC AGGAATTTAA      120
AAAGAAAGAC AAGACGTTGA AAGAGAATTC CAGAAAGTTG GAGGAAGAAA ATGAGAATCT      180
CCGAGCAGAG CTACAGTGTG GTTCTACACA ACTGGAATCC TCTCTCAACA AATACAACAC      240
CAGCCAGCAA GTCATCCAAG ACTTGAATAA AGAGATAGCC CTTCAGAAGG AGTCTTAAAT      300
GAGCCTGCAG GCCCAGCTGG ACAAAGCTCT GCAGAAGGAG AAGCACTATC TCCAGACTAC      360
CATCACCAAA GAAGCCTATG ATGCATTATC CCGGAAGTCA GCCGCCTGCC AGGATGACCT      420
GACACAAGCC CTCGAG                                     436

```

(2) INFORMATION FOR SEQ ID NO:709:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:709:

```

GCTGCTCTAT ATCTTAGAGA AAATAAAGA ACCACATGTT GCTTCCCTGC CTGCAAGCTC      60
TTCTGAATTC ATCACCATTC ATGTTCCCTC CTTCAGGGGA AATGAAGGCA GATTGTTCTG      120
TTGGTGCTCA CAGATCTCTT TCTGTTCTGA TACCCCTCCTC TTCCTCTCCT GCTTCTTTCC      180
CTTCATCATG TGCTCCTATA CAAGTCTCTC CCAACTTTAA AACAAAAACA AACCCTTCCC      240
TAAATCTTGT GTTTGTTCCA GCCATTAGAC TGTATCGTCC TTGCCATCCA CGTTATTGGA      300
AGAAGGCCAG CTCACCTCTA CTCCTTTTCT GCCCTTTCCC TCTTAATCTG CTGTCCTCTG      360
ATTTCTGCCC CCACAACTC GAG                                     383

```

(2) INFORMATION FOR SEQ ID NO:710:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:710:

```

GAATTCGGCC TTCATGGCCT AGGGGCCTGA AGATCTTCGG GTATTGCGCT CCCAGAATCT      60
GACCACAGTG AAGCTAAAAG GGGTGGGTGA CAGCTTCAAG AAGTATCCTG ACTACGAGTC      120
CAAGGGCATC AAGGCTCACT TCAACCTGGA TGAGAGTGGC GTGCTCAGTC TAGACAGGGT      180
GGAGTCTGTA TTTGAGACAC TGGTAGAGGA CAGCGCAGAA GAGGAATCTA CTCTCACCAA      240
ACTTGGAAC ACCATTTCCT GCCTGTTTGG AGGCGGTACC ACACCAGATG CCAAGGAGAA      300
TGGTACTGAT ACTGTCCAGG AGGAAGAGGA GAGCCCTGCA GAGGGGAGCA AGGACGAGCC      360
TGGGGAGCAG GTGGAGCTCA AGGAGGAAGC TGAGGCCCCA GTGGAGGATG GCTCTCAGCC      420
CCCACCCCTT GAACCTAAGG GAGATGCAAC CCCTGAGGGA GAAAAGGCCA CAGAAAAAGA      480
AAATGGGGAA CTCGAG                                     496

```

(2) INFORMATION FOR SEQ ID NO:711:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:711:

```

GAATTCGGCC TTCATGGCCT AGTATGGAAG GTGGAACATA AACTGAAATG ATCAGTTCAC      60
ATATTGTGTA ACTGCGTATT TTATATCAGT CGCTGGATTA GGGCCCTAGA GACAGTGGTG      120
GCTAAGTGAT AAAGTCTTTG CGCTTGTGGC ATTTTATAGT GTAGTGGGAA GACAGAAAGC      180
AAACAAGTAG AGAATCATAT ATGTAATGTG ACCTCAGGTC CAGCTAAGCG CCAGACAGAA      240
GAAAAAAGTA AGGTGAAGGT AGAGGGGTTG GAGCAGGAGG AAGGTGTTAT TTTAGGTAAA      300
GTGGCCAGGG AAGGCCTTTT GAAGAATTGA TATCGATTCC AAAATGATGA GAAGGTGCAA      360
TTGTGCCACC ATGGAGGAGA AGAGCTTTCT AGGCAGAGGG CAGGTGCAAA GATGTTAGGA      420
ACAAACACGG CTTGTTGAAA GAACACCAAT GTTTGAGGAA TGAGCCAGAC TCGAG          475

```

(2) INFORMATION FOR SEQ ID NO:712:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 608 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:712:

```

GAATTCGGCC TTCATGGCCT AATTTTGCAT AAAACCTCAT CAATCTCTGC CAATCACTGA      60
GCCCAAAACC ATTTTCACCT TGTTTTAGGT ATTTATAATA ACAGCACTCC CACTTCTCAT      120
GATCAATTTT CATCTTCAGC GGTTCAGGCT GCTTTAATAA AGTTCCATAA CCTGAGTGGC      180
TTTTAAATAA CGGAATGCAC ATCTCACAGT TCTGGAGGCT GGAAGTCCAA CAGCAGAGTG      240
CCAGCATAAT TGGGTTCTGG TGAGAGAGCT CTCTTGGGTT TCAGACTGCT GCCTTCTCAA      300
TGCAGCTTCA CATGGTGGAC AGAAAGAGCT CTCAAGAGTC ATTTTAAAG GCACCAATCT      360
AATTTATGAA GCCTCCACCA TAATAAGCTA ATTAATTCCC AAAGTGCTGA GATTACAGCT      420
GTCAGCCACC GTACCTGCCT GGGAAATTTT TTAAGCTCA AATTGGATAA GAGGGTTATA      480
GGAATATATT CATCTATCAT ATAGAAAAGA ATATGTGCTC AGTCCCAGGA AATAGAAAAT      540
ATATTACCTT ATTTATACTG TTTTAATTAA TGCTTTTAA AATCTGATTA ACTCTGGGAG      600
AGCTCGAG                                     608

```

(2) INFORMATION FOR SEQ ID NO:713:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:713:

```

GAATTCGGCC TTCTTGGCCT AGTGCACTCC TGTAATCCCA GCTACTCGGG AGGCTGAGGC      60
AGGAGAATCA CTGAAACCCA GGAGGTGGAG GTTGCACTGA CCCAAGATCA TGCCACTGCA      120
CTCCAGCCTG GGTGACAGAG CGAGAACGTC TTAAAAAATA TAAAAAATAA AAAAAAAGA      180
TTGCACAAAT CAGACAGTGA CCCAGAGCTC AGCCTTGAGG AAAGTCAGTG TTGGGGAGGG      240
GAGGGCAAAG AAGCAAGTAA AGGTTTAGCA GACATGGCAC CTCAGTCTGG ACTTGAAGGA      300
GGGCTAGGCA CAAAGGAAGG GGAACATGTC AGATGAGAAA CACGTGAAGG TTCAGCCAGA      360
TGAGCAAGGA AGGTTGGTTA GAAAGAGGAG CTGCTGGTGT GGCTCCTGTG AACACAGGTA      420
GATAGGGCAC GATAGAGTCA GGCAGTTAGA AGCCAAGCTG AGGAATCGAC ACTTGATTCC      480
ATAGGTAAGT AGGGGAACCT GAGGATGTTT AATCAGAAAT GAGATCTCGA G          531

```

(2) INFORMATION FOR SEQ ID NO:714:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:714:

```

GAATTCGGCC TTCATGGCCT AATTATCCC ATCCTTATCC CATCCTTATA AGGAATAATG      60
TATTGAATAA AGATTGTATC AGTATTTGTA ATTCAATAAA CCAGAACTTG TGGAAATAAA      120
TATGTAGGAG ACATAAATAT GGTGTCCTCA AATTGAATTA TGTGGGAAAA AAGTGGGGTG      180
GAGTTAAAGT CCAAGCCAAT AAAGTTGTAA CATTAAAGAA AGACAGGTAT GGGATGCAAG      240
GTGCAAAGAA AAGGTCATCA TATCTCATAC TGGGGTGAGA TAGAAGACTT CCTGAAGTAG      300
GCGATGCCTA TATTGAATCT ATAAGGACAA ACTGGCATCA ATATGTCAGG GAAGACAGGT      360
TGAAGGTGGT CCTGCCAGAG AAAGGAGCAA GGATAAAGGC AAGGAAGCAT GTAACGTAAT      420
TGTTTGTGGA GAAACCTCAA ATCGGCTGAG GAAAAACGAC TCAGGTATGT AGTAGGGCAC      480
AGTATAAGTA GGTCTCGAG                                     499

```

(2) INFORMATION FOR SEQ ID NO:715:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:715:

```

GAATTCGGCT TCATGGCCTA GAGATTAAAT GTTCCCTTAC CTTGCTGGAG GAACATCAAT      60
GTTGGAGGAA ACAACTTTTC TTTTGTGCTC AAGGAGACAG ATGGAGCGAG TGTTTTCTTT      120
TTCATGGTCA AGGATCCGGC TGGCTTTTTT GGTGTCTGCT GTTTTCACAT CTCCTCCAT      180
GGCCAAGGAA AACACGTGTT GATGAGACAT TTTTATACCA CAGTCACGTT TTAAGTCCTC      240
TGAAGTAAAT GTGAAGGTCA TTTCCGCTT AATGCTCCCC ACCTGTGAAA TGAACACAG      300
AAATTCTTAC TCACATAAAA CATCACCTTT GTACGACTAC TGCAGATGGC GGTGAGGAGA      360
GATTACAGAC ACTGTCCTTC CTGTTTCATCT GAAAGATTGT ATAATTTTAA TAAGAAAAAT      420
GCAACTCGAG                                     430

```

(2) INFORMATION FOR SEQ ID NO:716:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:716:

```

GAATTCGGCC TTCATGGCCT AGACCTTCTG GGTGAACGAG GGCAAGCAGC CCAAGTTCGG      60
CTGCTACGTG ATGGGCAAGC CCGAGCCCGA GATCGAATGG CACTGGGAGG GCCGCCCGCT      120
GCTCCCGGAC CGCCGCGGCC TCATGTACCG CGACCGCGAC GGCGGCTTCG TGCTCAAGGT      180
GCTCTACTGC CAGGCCAAGG ATCGTGGGCT CTACGTCTGC GCCGCGCGCA ACTCGGCGGG      240
CCAGACGCTC AGTGCCGTGC AGCTGCACGT GAAAGAGCCC CGCCTCCGGT TCACACGGCC      300
CCTGCAGGAC GTGGAGGGCC GTGAGCACGG GATTGCCGTG CTGGAATGTA AAGTACCCAA      360

```


CTCCCGCATC CCCACGGCCT GGTTCGTGA GGACCAGCGG CTGCTGCCCT GCCGCAAGTA 420
CGAGCAGATC GAAGAGGGCA CTGTCCGGCG CCTCATCATC ACAGGCTCGA G 471

(2) INFORMATION FOR SEQ ID NO:717:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:717:

GAATTCGGCC TTCATGGCCT AGCCACTCTT AGCAACACAG ATTTTCTTCC AAATTATGCC 60
TTGAAGCTGC TCCCGGAGCC ACCCGCTCAT CAGCACCCCTG CTCCTGTGGT CTTTCTCGTG 120
AAAGGCAGAG GGGAGATGCC TGTGCCCCG AGTCTTCTCT GCAGCTGCCG TGGGAACAGG 180
CACCTTCCCG GCTGCTGGGG ACACAAGGAG GGGGAGTCAC CGTGGCTTGC TCACTTTCCA 240
GATCAGCCAA CTGCAGAAC A TTTGTTGTTG TTTAGATCCC ACGTCTGACG GTTTAGAACA 300
GCTTTTATAA CATGGTTAAA CATGTTTACA AAGCAAGGGA GACATCTCTT ACCTTGACAA 360
CACGAGGCTC CCACAGACCG CCTTCCCCCA GCTCGAG 397

(2) INFORMATION FOR SEQ ID NO:718:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 539 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:718:

GAATTCGGCC TTCATGGCCT AGAAGGAAAAG AAATTTTATG TGAGAGAGCA TCTTGTATGG 60
CAAATTCCTG TCCTAAAGTA GAATGACTAG GAAAGAGCAA AATATAGGAC AAGTCAGAAA 120
GTCATAAGAT GGGAAAGAAA AACTTACAAC TGCTAGATCT TCTCCTGTCT AGAAGTGTG 180
TGTGTGTGAT GCTTATATGA AGGTACTCTA ATTAATTGGA TTAAGAGAAA ATGAAACCCC 240
ATCTCTACTA AAAATACAGA ATTAGCCGGG TGTAGTGACA CATGCCTGTA GTCGCAGCTA 300
CTCAGCAGGC TGAGACAGGA AGATAACTTT AACCCAGGAG TTGGAGGCTG CAGTGAGCCA 360
AGATCGCGCC ACTGCACTCT AGCCTGGGAG AGACAGAGCG AGACTCCGTC TCAAAAATGA 420
AAAAGTAGAG CCTGGTAGAG TGAAGCCACT TGCAGGAGTC GTTTAGTTAG GGCTGTGTTG 480
CCTTACAGTG CTGGTGTCTT CACAGATGAT AATAGTAATA AAAAACACCA CAACTCGAG 539

(2) INFORMATION FOR SEQ ID NO:719:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:719:

GAATTCGGCC TTCATGGCCT AGGCAGTGGA TAATTGTCCT CTGGAGGAAC CATCTGTGAC 60
ACATTCTACA TGGTTCCTTA GAGGGTCCCC AAGTGGGATT GAGTCCCTCT TGTTCCTAGC 120

```

AGTAAGCAGT TCTGTTATAC ACTCTTTATA TGCTTTTCCT CCTTTCCTCT CTCAGTCTCT 180
CTGATCCTTC CACCTGTGCT CTGGGTTTAC CTCTCAAGTA AACCACCTGC ACACAAGTCC 240
CTGTCTCAGG CTCCATTGGG GAAACCAA CTAAGACACC ACCTCAAAAC ACAGAATTTT 300
ACGAGGCTCC AAATGCCTCA GAAAAGTAAT GTAAATATAA AATGACCAAT TTTTGAAGT 360
ATATTAATCC TAGTTATTTA ACTCGAG 387

```

(2) INFORMATION FOR SEQ ID NO:720:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:720:

```

CCCGTGATA GTTGC AAAT ATTTCTCCT CTCTGTAGG CTGTTACTC TTGTTGATAG 60
TTTCTTTTGC CATGCACAAG CTTTITGGTT TAATTAGATC CCATTGTGCA ATTTTIGCTT 120
TTGTTGCAAT TGTITTTGGC GTCTTCATCA CGATATCTTT GCCAGTTCCT ATGTTCAAAA 180
TGGTATTACC TAGGTTGCCT TCCAGAGTTT TTATAGTTTT GGGTTTTTAT TTA CTGAG 239

```

(2) INFORMATION FOR SEQ ID NO:721:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:721:

```

CTCGAGCACT ACCCTAGACG GTCTCATCAC TATACTGGCT CCTCCTTACC CCCGTAAATC 60
TCCCAGGTAC ACTTCTGAT CACCCTCCGG ATACCTCATC CCTATCTATT CCTTTTATAA 120
ATAATTCCCT GCTCCTCCTT CTCACCCACA ATCCACTCGC AGTTCAAGGC CTCACTGCCA 180
TCGACTCCAC TGTCTGTGAG TGCTTCCCAA TATGCCCCAG GACCCCTCCT GGTGTCACGC 240
TCTGTATCCT GACACCCCTT GTAGACGAGT CCCGAAATTC CCGCCCCGTC CCTGGAGCTC 300
CCTAGGCCAT GAAGGCCGAA TTC 323

```

(2) INFORMATION FOR SEQ ID NO:722:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:722:

```

GAATTCGGCC TTCATGGCCT AGGCCTGTGG AGCCCCAGCT CTGGGTCCCT AGCCCGGGTC 60
CAGGCAGCCA GGCTCCCTCC TGAGCTGAGA AACGGAACCT CGCGAACCAC TGGTGGCACA 120
TCCTTCTCCT CCCCCGCCCC TGATCACCCG CCCCCGGATC AGAAATATAT CTATATTCTC 180
GACTAAAGTC TCATCAGGAA ATATTTCCTG TCTTTTATT TAAGCATCAA ATTGTTTATG 240
TTGATTTAAA AAGGAAAAA TACAGACGAC TCGAG 275

```

(2) INFORMATION FOR SEQ ID NO:723:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:723:

```

GAATTCGGCC TTCATGGCCT AAGAAGCAAC AATCATATTA GCTGGGGGAG GAGGATAGTT      60
TGGTATTTTT GTAGTTTGCA CAGTGACCTT TTTAAAAATC TGGTTAGGCA AAAATAGTGT      120
GATCTTGTTT GTTGTCTCAC TTCATTATGA TCACAGAATG ACCTGGTATG ATGTTAGTGT      180
TTTATGAGAG TGTATGTTT TAACAGGGGA ACACCGCAGT CAATTCCTAA CAACACTAAA      240
GTGTCAGTTC TGTTCTGAC ACCAAGGGCT GTTTTCTTT TTCTCATATA ATGTTGAGGC      300
AACCAGGAAG ACTCGAG                                     317

```

(2) INFORMATION FOR SEQ ID NO:724:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:724:

```

GGCCTCAGCA GGTGTGAAGC GTGTGCTTTA GTTTCGTGGG AGGCCTGGCA TCCCCGAGAG      60
GGAGGGGAAA GGTAACCACT CCTTTGTGGA GGTCCGCCAGG GTCATTGTCG TGGATTTGCA      120
CAGTCGGCTG GCGCGTGCAA TGGCGGAAAG AAAAGGAACA GCCAAAGTGG ACTTTTTGAA      180
GAAGATTGAG AAAGAAATCC AACAGAAATG GGATACTGAG AGAGTGTTTG AGGTCAATGC      240
ATCTAATTTA GAGAAAGCAG ACTCGAG                                     267

```

(2) INFORMATION FOR SEQ ID NO:725:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:725:

```

GAATTCGGCC TTCATGGCCT AAGTCAGTGG TAAGCCGCAG CAGTTTCCTG CCACTCGTAA      60
TATGGCAATT AAAAATTTTA AATTTGTGGC TGCTTGGGGT CTGGGAGGTG ACCTGCTCCT      120
CAGCAAATTT TGACTGATAA ATTAATGCCT GGGTCTTCAG CCTGGTTCTT TGCTGGCCAG      180
TGTGACAACA GTCTGTCAG TCTCTGGGGG CACATTATAA TTAACAGATG TAATCTTTCT      240
CCGGTTCAGG GTCATCTGTG AATCAGGGGT ACTGCCCCAG TAGAACTAGG AACATCCAGC      300
AAAAGACTGT TTTCAAATA TACAATTAAG TGAAAAAGC ATGAAGAAGT CGAG          354

```

(2) INFORMATION FOR SEQ ID NO:726:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 154 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:726:

GAATTCGGCC AAAGAGGCCT AGAGGTTGAC CTGAAAAACA ATGAAACACA TGAACACACT	60
TCCGATTTTC TCCTCGCTGA TTAGCTTCCT GCCTGCTGTC AGTGCTGGAC GAAGTGCTAT	120
AACTACTTTA TGTAAACATTA CAGAACAGCT CGAG	154

(2) INFORMATION FOR SEQ ID NO:727:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:727:

GAATTCGGCC TTCATGGCCT AGTGGGAAGA TGTGGATGAT GAGAAGGGAG ATAGCAATGA	60
TGACTATGAC TCTGCAGGCC TATTGTCAGA TGAAGACTGT ATGTCTGTGC CCGGAAAAAC	120
TCACAGAGCT ATAGCAGATC ACTTGTCTG GAGTGAGGAA ACAAGAGTC GCTTCACGGA	180
GTATTCGATG ACTTCCTCAG TCATGAGGAG AAATGAACAG CTGACCCAC ATGATGAGAG	240
GTTTGAGAAG TTTTATGAGC AATATGATGA TGATGAAATT GGAGCTCTGG ATAATGCAGA	300
ATTGGAAGGT TCTATTCAAG TAGACAGCAC GACTCGAG	338

(2) INFORMATION FOR SEQ ID NO:728:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:728:

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGAACTCTC CCAGAGAAAC CAGGCAGATA	60
CTGCTCCACA CCGGTGAGCT GCTTCTCACC TGGGTAGTCT AGGGTGGTTT GCTCCAGAAT	120
TGTATTTCTG CTTTTCTTT TTTTAACTTG GCAGTGGTTA ACCATTCCCT GGAGCAGCAC	180
CAGGTAAGTC AGCTTGATC AGAGTCATCT GCTTTACCTG ACATGAGCAC ACGTTGTCAT	240
ATATTTGCAC ATGCAGATAT CATATGTTAA ACAATATCAC ATTGTTGAAG AAAATTACAC	300
TGGAAAGCGT AAAATATAGT TTGGATGCCA TATTGAGTGT AACTTAATCC ACCCGATTCA	360
GAACCTTTGT AGAGTGCCTC GGAGTTCCTA TTTGGAAATA TCAGTTAGCA GTTTTAGTCA	420
GTAGAGACTC GAG	433

(2) INFORMATION FOR SEQ ID NO:729:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:729:

GAATTCGGCC	TTCATGGCCT	AACAAGAAAC	ACCAAGTACC	TCGACCTCAA	GAATTCACAA	60
GAGATGCTCC	GCTACAAAGA	GGTCTGCTAC	TACATGCTCT	TTGCCCTGGC	TGCCTACGGG	120
TGGCCCATGT	ACCTGATGCG	GAAGCCCGCC	TGCGGCCTCT	GCCCACTGGC	TCGGTCCTGC	180
TCGTGTTGCC	TGTGTCCTGC	GAGGCCGCGG	TTCGCCCTTG	GAGTCACCAT	CGAGGAAGAC	240
AACTGCTGTG	GCTGTAATGC	CATTGCCATC	CGGCGCCACT	TCCTGGACGA	GAACATGACT	300
GCGGTGGGAC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:730:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:730:

GAGTTGTCTC	TCTGAATTAA	CTTTCTCACC	AATAGCTCCT	CTTTAAGATC	AATAACTCTT	60
ATGTTTGAC	TTTTTAGGCT	ATTTTCTAGA	TCTTGATGT	GTGTCTTATT	ATTTTTTATT	120
CTTTTGTCT	CCTCTGTGAA	TTTCAAATA	GTCGAG			156

(2) INFORMATION FOR SEQ ID NO:731:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:731:

GAATTCGGCC	TTCATGGCCT	ACTTGAACCT	AGATCTCACC	CCCAGGATGT	TGCGGAGGCT	60
GCTGGAGCGG	CCTTGACGCG	TGGCCCTGCT	TGTGGGCTCC	CAGCTGGCTG	TCATGATGTA	120
CCTGTCACTG	GGGGGCTTCC	GAAGTCTCAG	TGCCCTATTT	GGCCGAGATC	AGGGACCGAC	180
ATTTGACTAT	TCTACCCTC	GTGATGTCTA	CAGTAACCTC	GAG		223

(2) INFORMATION FOR SEQ ID NO:732:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:732:

```

GAATTCGGCC TTCATGGCCT AAATTATTGC AAAGTGTATA TTGGTTAAAA AAAAAAAGGA      60
GGAAGAGGCA GTTTTTCATG ACGGTTAAAA GTGCAGGATT TGGAGTCCCA TGGTCCTGGG      120
TGTGAATCCT GGCTGTGGCA CTAACATCTCT GTGTGACTGG CTGTGAACCT CTCGTGCCTC      180
ACTTTCTTCA TCTGCAAAAT GGGTAGTTGT ATAGCAAATG CACATAGAGA AACTTAAACA      240
CTTTGGCACA TTGGAAGCAC TCAGTAAATG TTAATTGTTA TTATTGTTGC TCTAAAGAGA      300
ATCCTCGAG                                     309

```

(2) INFORMATION FOR SEQ ID NO:733:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:733:

```

GAATTCGGCC TTCATGGCCT AGATTAAATC TAGACCTGCC TCAGCTCCAC TCCTTATGGT      60
TTGCCACCAT AACCTACAAC ATTTGTCCGT CCACCCACG TGTCTTCTTC CTTTGTGGCA      120
GGAACCTCTTA TCTCTGCCTA CCAACCAATT GGTCAAGGAGC ATGCACCCTA GTGTCTCAAT      180
CTCCAGACAT TAACATCCTG CCAAACAACC AGACCATCCA GGTTCCTTTA GTGACCCCTA      240
TCTCATCCTC TTCCACATGC AGTAGGCAGG TCTAG                                     275

```

(2) INFORMATION FOR SEQ ID NO:734:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:734:

```

GCAGATCAGA GGCACGTTTC CCACAACTGC GAAGAGGCGC TGAGGCAATT CTGCAAGAAG      60
ATTTTGGGGT TTGGGAAAAG AAGCTATGGA AAACGGAGGG GCAGGCACTC TGCAGATAAG      120
GCAAGTCCTG CTTTCTTTTG TTTTGCTGGG AATGTCTCAG GCGGGCTCTG AAACCTGGGAA      180
CTTTTGGTG ATGGAGGAAT TGCAGAGCGG GAGCTTTGTA GGAAATTTGG CAAAGACCCT      240
GGGACTCGAG                                     250

```

(2) INFORMATION FOR SEQ ID NO:735:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:735:

```

GAATTCGGCC TTCATGGCCT ACACAGACTG GGCAATTTAT AATGAACAGA AGTTTATTTG      60
GCTCTTGGGT CCAGAGGCTA GGAAGTCCAA GAGCATGGTG TCAAGCATCA GGTGAGGATC      120
ATCACCCCGT GGTAGAAGAT GGAAGGCAGA AGTGAGCGTG TGAGACAGAG AGGGAGAATT      180
GGACTCAACT CATCCTTTTA ATCAGGAACC CACTCTGTCA GTAACGAACC CATCCCCACA      240

```

ATAATGGCAT TAATCCATTC ATGAGGCCCC TACCTCTTTT TCTCCCCCG CCCCCGAGA 300
TGGAGTTTTC CTCTTGAGCT CGAG 324

(2) INFORMATION FOR SEQ ID NO:736:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:736:

GAATTCGGCC TTCATGGCCT AAACACATAC CAGATTCTTA GATTCATTG GTGAAGGAAG 60
CCTCTGAATT AAAACTTTTA AATATTTCTG ATTTGCAACC AGACGAAAAA GAAGAAAATT 120
GACAACTTTT TTGATGCAAC TTTGTGAAAT CATGGTGTTT CTGGTTTTTC TGGTCTGGTT 180
TTTGTGTGTT TTTGTGTTTG TTTTGCCACA GTTTAGTTCC TCACCTGATC TTTCTTGTGA 240
TCCACTTCAG AGTCTCGAG 259

(2) INFORMATION FOR SEQ ID NO:737:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:737:

CTCGAGGCGG TGCCAGACAC GGGTCTCCTC CGACTGGGCG GTGCGTGGGA TGCCGCCAGC 60
GTCCAGGTAC TGCCTGATGC GGATGTAGGC GATGCAGGCT GACTCGTCGC CCATCAGGTG 120
GATGTGGGGA TTCAGGATGG TGGTGTGCAC GGGCTTGCTG TTCCGGGACC ACAGGTTTTT 180
AAAATAGAAT CGATGGAACT CCAGGCCCTC AACCAGGTTC CCCAGGGCCT CAGGTTTCGAA 240
GGCTGTCATG CCAGGGTGC ACATCTTCGT GTAGGACTCA AAATCTCCAT TGCTTATGGC 300
TTCAATCAGC TGCTCTGTCA CTTTATAAT TTCCTGTTTC CGCACTTTGG TGTCTTCATC 360
CTCGATGGTG GTGTTGGTGC TCTCTGAGTA GGCCATGAAG GCCGAATTC 409

(2) INFORMATION FOR SEQ ID NO:738:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:738:

GAATTCGGCC TTCATGGCCT ACTTTCCCTT CCTTCCTTCC TTCCTTCCTC CCTCCCTCCT 60
CTCTCCTCTC TTTCTTCTT CCTTGCCCTC TTCCATCCTT CCCTCCCTCT CTCTCTTTCT 120
TTCTTTCTTT CTCTCTCTCT CTCTTCTTT CTCTCTCTCT CTCTGTCTTT CTTCTCTCT 180
TTCTTTCTTT CCATCTTCTT TTCTTCTAT CTTTCTTACT TTTGATGTAG CTGTCACGAC 240
CTAATGAAAA TACTGGCATG AGTGATGCCA CCTTAGATT CTCCACCTTC CTGTTCTGTG 300
CCTATTCAAC AACATGAATT GGTGTTGGC TGTAAGTACT TGGTGGGTTA TTGCTCATAG 360

ATTGAGTTGC ATTTTGTCTG AGATAGTGCT GTTACCAAAA GCAGGGGTGC TGCTTGAAGA 420
AGTAAACCTA ACTCTGAAAA ATAGAGACTC TCCAGAAACA CTCGAG 466

(2) INFORMATION FOR SEQ ID NO:739:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:739:

GAATTCGGCC TTCATGGCCT ACATTCTGCA AACTATTTTG TTATTAGCTT TTCACTTAA 60
AAATAGCCCT GCTTGCAAGC AGGCTCTGTG GTGCAATGGA TAGCGCATTG GACTTCTAGC 120
CTAAATCAAG AGATTCAAAA ATAGCCCTGC TAAATATTTG CAATCTTTCC TACGCTCCTT 180
TTTCCCCCAA AGTGACTTTG GATATCCAGA GTTACCAAAT CTAGTATTTG AAGTCCTTAG 240
GTTTGAGGGT TGAAAGTGAA AGGCAAGCTG TTTTAATGAA AATTCCTAAC TGAAGAGAGC 300
GGAGACTTAA GATGCTTAAA TTTTGGTCAC ACCTGAGCGG TATTTGTTTG CATGGCAGGA 360
GCTCGAG 367

(2) INFORMATION FOR SEQ ID NO:740:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:740:

GTGATGGACA AAGACAGGGA AGGCCTCATC AGCAGGGATG AGATCACAGC CTACTTCATG 60
AGAGCCAGCT CAATCTATTC CAAGCTGGGC CTGGGCTTTC CTCACAACTT CCAAGAGACC 120
ACCTACCTGA AGCCCACTTT TTGTGACAAC TGTGCTGGAT TTCTCTGGGG AGTGATCAAA 180
CAAGGATATC GATGTAAAGA CTGCGGGATG AACTGTCACA AACAATGCAA AGATCTGGTT 240
GTGTTTGAGT GTAAGAAGCT CGAG 264

(2) INFORMATION FOR SEQ ID NO:741:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:741:

GAATTCGGCC TCATGGCCTA CACGACCAGC ACCGCCACTG CCACCTCACA GCCTTTCCTC 60
TTCGGGGCGC CCCAGGCCTC TGCTGCCAGC TTCACCCCGG CCATGGGCTC CATATTCCAG 120
TTTGCAAAC CTCCTGCCTT GCCCACAACC ACCACAGTCA CCACCTTCAG CCAGTCCCTG 180
CCCACTGCCG TGCCAACGGC CACCAGCAGC AGCGCTGCCG ACTTTAGTGG TTTTGGCAGC 240
ACCCTCGCCA CCTCCGCCCC GGCCACCAGC AGCCAGCCCA TTCTGACGTT CAGTAACAGC 300
AGCACCCCGG GCCTCGAG 318

(2) INFORMATION FOR SEQ ID NO:742:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:742:

GAATTCGGCC TTCATGGCCT AAGAAATGAA AAAGATTATT GAAACTATGC CAATGACTGA	60
GAAAGTTGAA GAATTGCTGC GTGTCATAGG TCCATTTTAT GAAATGTGCG AGGACAAAAA	120
GAGTGGCAGG AGTTCTGATA TAACCTCAGT CCGACTGGAG AAAATCTCTA AATGTTTAGA	180
AGCTGAAAGC AGTGACAGTG GAGCCGAGTC TGAGGAAGAA GAGGCCCAAG AAGAAGTGAA	240
AGGAGCAGCC CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:743:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:743:

GAATTCGGCC TTCATGGCCT ATGTTTTTAT AGCACCGATG GTACTGTTTT ATTTATTGCC	60
AATAGACCAC AACATTCACA TCTGTTTTTC CTCAAGGGAA CCGTATTTGC TTTTGGTTGA	120
AGGATTTATC TATTTGATAC TATCCAGAAT ATTGTGAAGC TATAATTTCC TGGGTTATAT	180
TTTAGATGGG TTGCTGTCAT GGTGGTAAAA TAAGCTTTTT CCTCTCGCCT ACGTCCTTTG	240
GAAGATCTCC TGATCATACA TAACTAGGTA GGGCTTATTC TTGCTGCCCG AGCTTGGCAC	300
CCAGCTCTAG ACTGTTTCTT TGAGCATTAC TGCAGATTGG AGACGTGTGT GAGAGGAGCA	360
GCGCTCAGAA ATAGGGCTTG AGGCTCAAGC AGAAACTGAA GCTCTCATTG AAATGAAGAT	420
GCTCTCTCTA CCGCACGATC GGCAGTGAGA AAAGGAGGAT GAAAATCCTT CTCATCACAA	480
AGAGCTTGAA GGAACCCACG TCCCAGATT AGCAACCCTA GAGTTCATCT GCTCAGGCCG	540
GGAAATGTGT AAGCTTCCTT GATCAACTCC AGGCCTCGAG	580

(2) INFORMATION FOR SEQ ID NO:744:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:744:

GAATTCGGCC TTCATGGCCT ACCCAGAGAC TCGCGGACGC TCACGATAAC CAAGGACGAC	60
CGCGAACCAA GGGCAAAATA ACATGGCAGC CAGACGAATT ACACAGGAGA CTTTGTATGC	120
TGTATTACAA GAAAAAGCCA AACGATATCA CATGGATGCC AGTGGTGAGG CTGTAAGCGA	180
AACTCTTCAG TTTAAAGCTC AAGATCTCTT AAGGGCAGTC CCAAGATCCA GAGCAGAGAT	240
GTATGATGAC GTCCACAGCG ATGGCAGATA CTCCTCAGT GGATCTGTAG CTCACTCTAG	300
AGATGCCCGA AGAGAAGGCC TGAGAAGTGA CGTATTTCCA GGGCCTTCCT TCAGATCAAG	360

CAACCCCTCT CGAG

374

(2) INFORMATION FOR SEQ ID NO:745:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:745:

```

GAATTCGGCC AAAGAGGCCT ATTGGTTTCC CTGCTTCCAT TCTTACTCCC CTACACTCTG      60
TTCTCCAAAA AATAACCATT GTGATCCTTT AAAATCCTGA CTCTCTCCTG CTCAGAGTCA      120
TCCAGTGGCT TCCCATATCA CGTAAATGA AACCCCAATC GCTCCTTACT CTGGCCTGCA      180
GGGGCCTGTG TGATGGGCCT TCTCCAGCTT CGTTCTTCTT TTCCTTCTGT TCTCCCCTCT      240
GCTTACCTAC TCCATCTCCA GGGCTTCTTT CCAGCTCAAG CCCTTTCCTG TTGAGAGCAT      300
TTGCTTTCCC CAGGGCACTC GAG                                          323

```

(2) INFORMATION FOR SEQ ID NO:746:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:746:

```

GAGAACAGTG TTACCAAAGA AAAGGACATG TTCAATTTC AAGGAGCCCA GGAGGACATC      60
TCTAGACTTC GCAGGAAGCT GGAGACCACA AAGAAACCAG ACAATGTACC CAAGTGTGAT      120
GAGATTCTGA TGGAAGAGAT TAAGGATTAC AAGGCACGCT TGACCTGTCC ATGCTGTAAC      180
ATGCGTAAAA AGGATGCTGT TCTTACTAAG TGTTTTCATG TCTTCTGCTT TGAGTGTGTG      240
AAGACACGCT ATGACACCCC CCCCGCGCTC GAG                                          273

```

(2) INFORMATION FOR SEQ ID NO:747:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 666 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:747:

```

GAAGATCTTC GCTGTCCTCT CTGCCTCTAT CACACCAAAT ACAAGCGCAA CATGATTGAC      60
CACATCGTGC TGCACCGAGA AGAGCGTGTT GTCCCCATTG AAGTTTGCCG GTCCAAACTG      120
TCCAAATACT TGCAGGGAGT AGTTTTCGCG TGTGATAAGT GTACCTTCAC CTGCTCCAGT      180
GATGAGAGCC TCCAGCAACA TATAGAAAAG CACAATGAAC TGAAACCTTA CAAATGCCAG      240
CTCTGCTACT ATGAGACCAA GCACACGGAG GAACTGGACA GCCACCTTCG GGATGAGCAT      300
AAGGTAAGCC GTAACTTTGA GCTGTTTGA CGGGTTAACT TGGATCAGCT GGAACAGATG      360
AAGGAGAAAA TGGAGAGCTC CAGCAGCGAT GATGAGGACA AGGAAGAAGA AATGAACAGC      420
AAGGCTGAAG ACAGAGAGCT GATGAGATT TCTGACCACG GGGCTGCTCT TAACACTGAG      480

```

```

AAGCGTTTTC CATGTGAATT TTGTGGACGG GCGTTTTCAC AGGGCTCTGA GTGGGAAAGA      540
CATGTGCTGA GACACGGCAT GGCATTGAAT GACACCAAGC AGGTGAGCAG AGAAGAAATC      600
CACCCAAAAG AGATCATGGA GAACAGTGTT AAAATGCCCT CCATAGAGGA AAAGGAAAGT      660
CTCGAG                                         666

```

(2) INFORMATION FOR SEQ ID NO:748:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:748:

```

GAATTCGGCC AAAGAGGCCT AACAAACGAA TATAGTACAC GACCTTCCTG CAGCAGTTCT      60
AAGCTACTGT CAAGTATGGA AAATCCCGGC AATTCTGTAC TTGTGTTATA CTGATGTGAT      120
GAAATTAGAC CTAATCACAG TGGAAAGCTT TAAGCCTATA CTTTCTACCA GAAGCTTGAA      180
GGGTTTGGTT AAGAATATTC CCCAAAGCAC TGAGATACTA AAGAAATTGA TGACAACNAA      240
TGAGATTCAG AGTAACATTT ATACATGATC TTAAACATTG TTTTGTAGTG TATATTACTT      300
GTCCATTCCT TTAAGGGGAG CAGCCTGCAC TCTTTTGTAG ATTACTTTTG GGGGATATAT      360
TTTGAGAATG ATGAAACGG                                         379

```

(2) INFORMATION FOR SEQ ID NO:749:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:749:

```

GAATTCGGCC TTCATGGCCT AGGCGCAAGG CCGAGCGTTC CCAGCAGGGG GAGAAACCCT      60
TCACACCCCA GGCCCTTCAG GAACTGGGGC CTTGCCTTGC AGCCACATGG CCCCATCCCA      120
GTTGGGGAAG CCAGGTGAGC TCTGACCCTT GGGCCTGGGC CTCTGCCCTT CCCAACCCAG      180
CCCTCGTCTC CCTCGACAGC GCCCTGCTG TCTTCCCCAC CGCAGTCACC ACCACCCGAA      240
ATGCCACGTG GTCACGTGTC ACTGCCCTGT TCATGTGCCT CTGCGGGGCA GGGCCTTCCT      300
GGTTTTGTTC ACTGCTGTAC CCAGATAGCC TCGAG                                         335

```

(2) INFORMATION FOR SEQ ID NO:750:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:750:

```

GCAAAGACCC AAGAAGTGAA TATGCTCCGG GAACAGACCA CTGGGCTGGC AGCTGAGTTG      60
CAGCAGCAGC AGGCTGAGTA CGAGGACCTT ATGGGACAGA AAGATGACCT CAACTCCCAG      120
CTCCAGGAGT CATTACGGGC CAATAGTCGA CTGCTGGAAC AACTTCAAGA AATAGGGCAG      180

```

```

GAGAAGGAGC AGTTGACCCA GGAATTACAG GAGGCTCGGA AGAGTGC GGA GAAGCGGAAG      240
GCCATGCTGG ATGAGCTAGC AATGGAAACG CTGCAAGAGA AGTCCCAGCA CAAGGAAGAG      300
CTGGGAGCAG TTCGTCTACG GCATGAGAAG GAGGTGCTGG GGGTGCCTGC CCGCTATGAG      360
CGTGAGCTCC GAGAGCTGCA TGAAGACAAG AAGCGTCAGG AGGAGGAGCT CCGTGGGCAG      420
ATCCGGGAGG AGAAGGCCCG GACACGGGAG CTGGAGACTC TCCAGCAGAC AGTGGGAAGAA      480
CTTCAAGCTC AGGTACATTC CATGGATGGA GCCAAGGGCT GGTTTGAACG GCGCTTGAAG      540
GAAGCCGAGG AATCCCTGCA GCAGCAGCAG CAGGAACAAG AGGAAGCCCT CAAGCAGTGT      600
CGGGAGCAGC ACGCTGCCGA GCTGAAGGGC AAGAAGGAGG CGCTCGAG      648

```

(2) INFORMATION FOR SEQ ID NO:751:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:751:

```

GGAAAGAATC TAAAAGAAGA GAAGCGACCG GTGCTTTTAA GGGTGTCTAA TTTTCAAAG      60
AGACGTCTGG GAGTATTTTG CTCTGGGCGT TTGGGTGAGC AGGACCGGGG CGTTGGAGGG      120
TGCGGCGGGC TTGGGAGCAG GGAAGGTTCC GAGTCCTAGG GAGGCGGCAG CGCTCGGCTA      180
TGCCCTCTGG AGACTGGCGG GGCTGCGGGG CCGAGGGGAC CCGCGAGGGA GCCGCGCTGC      240
GGACGCGCTG AGCGCGGGAG CTCGAG      266

```

(2) INFORMATION FOR SEQ ID NO:752:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:752:

```

GAATTCGGCC TTCATGGCCT AGGATGTTT AAGGCTAGGC CTGAGCGAGG AGGAGGCAGG      60
GGAGACCTGG CAGGTATTGA AGTACCTGGG AAGAAAGGCA ATGGGGATGG TGGTCCTGCT      120
CCAAGATGAT AAGTGGAGGC TGAGCGTCAC TGGTACTGGG GGCCATGATC CCCAGGGCCA      180
CCCTGGCACC AGGGTGCAGG GGATGCGGGG CCTGAGCAGG AAGAACAGAG ATCTGCGGGC      240
TGCACCGACC CATCCTGCC CCTAGGCTGA AGAACGGCAT CACTCGAG      288

```

(2) INFORMATION FOR SEQ ID NO:753:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:753:

```

GAATTCGGCC TTCATGGCCT ACTGAATTG CTTTCTTGC CTCTCTTTAG TCACCTGTCA      60
CAGGAGGTTT CTGCTCAGTA ATGATATTGT GAGTTAGGAT AATAACTTTT TTTTCTTGT      120

```

GCTTCAGATT	TAGAAGAAAA	GATCCTGTTT	CCATTTGAAA	GGAAGTGTAA	GCTTTTATCT	180
TTTAACCAAC	TGAACAATAC	ACCAAAAGCA	GCCTAGGGAT	GAGCATTTCT	TTGAAAGCAA	240
TTAGGTTATT	CACCTGGTAT	TAAAACTATT	TACTGTTTAA	AAATCTGTGA	CTTCATGAAG	300
TTGATTTTAA	AAGGCAGCAT	CAAAAAGTGA	AAAGGAAGGG	AAAAAATAGG	CAGCTTCTCT	360
GCACTTGTTT	GGAGCTCCCC	AAAACAGGAG	CCATGGAGAA	GTGGCATCAA	GACCGGGCTG	420
CCCTTTCGAG	AACACCCTGT	GGCAGTTCAG	AGACACGCTT	TTCCTACACT	GCATGCAGCC	480
GCTCGAG						487

(2) INFORMATION FOR SEQ ID NO:754:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:754:

GCTGGGTTTA	GGCGATCCTC	TTGCTTCAGC	CTCCCAAGAA	GCTGGAGCCA	CAGGCATGCA	60
CCACCACGCC	CAGTTAATTT	TTGTATTTT	TGTGGGGACG	GGGTCTCACT	TTGTTGCCCA	120
GGCTTATCTG	GAAGTCTGG	TTTCAGGCAG	TTCTCCTTCC	TTAACCTCCC	AAAGTGCTGA	180
GATTATAGGT	GTGTGTGAGC	TATCACACCT	GGCCTAGAAA	ATTATAAGAA	AATATTAAATC	240
ACATAATCTC	ACTACCCATT	GATGATTTAA	CATCTAGTAT	ATACATATGT	ATATATAATT	300
TAAAAGTAG	GGTTATATTA	TATAATTACT	TCATTATTCT	TGTTTCCAC	TTAATATACT	360
TAAGATATCT	TTCAAAATCA	CTAAATACAG	GAACATAGTA	TATCATCTTT	CAGTAGCCTC	420
ATTGTATAGC	TAACCCCTC	GAG				443

(2) INFORMATION FOR SEQ ID NO:755:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:755:

GAATTCGGCC	TTTATGGCCT	ATTGATTTC	TGGGCTCAGG	AGAGGATGGG	GAAGGGGCTC	60
CAGACCCTCG	GCGGTGCACT	GTGGATGGGA	GCCCCCATGA	GCTGGAAAGC	CGTCGGGTCA	120
AACTCCAAGG	CATTCTGGCT	GACCTGCGGG	ATGTGGATGG	GCTGCCCCCA	AAAGTGACTG	180
GCCCGCCTCC	TGGCACACCC	CAGCCCCGGC	CACATGAAGG	TTCTTTGGC	TTCTCCTCAG	240
ACGTCTTCAT	CATGGACACT	ATCGGGGGCG	GGGAGGTGAG	CCTGGGGGAC	TTGGCAGATC	300
TCACCGTCAC	CAACGACAAC	GACCTCAGCT	GCGATCTGTC	TGACAGCAAA	GATGCTTTTA	360
AGAAGACGTG	GAACCCCAAG	TTACCCCTGC	GCTCGCACTA	CGACGGCATT	CGTTCCCTGG	420
CCTTCCACCA	CAGCCAGTCG	GCTCTGCTCA	CCGCCTCCGA	GGACGGCAGC	CTCAAGCTCT	480
GGAACCTGCA	GAAGGCGGTC	ACGGCCAAGA	AGAATGCGGC	GCTAGATGTG	GAACCTATAC	540
ATGCTTTCCG	GGCTCACAGG	GGCCAGTGT	TGGCTGGACT	CGAG		584

(2) INFORMATION FOR SEQ ID NO:756:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:756:

```
GAAATTAAAA AAATAAAATC AAGTTCTTGG GTGGTGGGAA ATTGGCCTGT ATTTTCTTCTT    60
CTCAGTGGAA TTTGCTGAGT AAAAAATTAT AGGCTCAAAA ACTGAGAACT TTGAAGATAT    120
TGCACCATAT TCTTTTGTGA TTGAGTGTG CTGATGAGAA GTCTGAGGTC AGTCTGTTGC    180
TTGCTCTTTC TAGGTAAACT GTGCTTTTGA TATTTTTCCT CCTCTAGAGG TTTTGAGAAT    240
TTACTCCTTA TCCATGTTAT TCTTAAATTT CACCACATTC TCGAG                    285
```

(2) INFORMATION FOR SEQ ID NO:757:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:757:

```
GAATTCGGCC TTCATGGCCT AGAATGCTTT GAATCCATAT CTTTTTCAGA AACATACATG    60
GAAATACAGA ACTACACCTG TAATTACAGA GGGCATATGA ACCCTAGTTT GATAAGCCTT    120
GCTTTAAAGG ATGCAGTGTG TTCTATTAAA TGTATTAAAT ACAATTGCAG AAATGGAAAA    180
TGTGGACCTC CATTAAACAA ATTTTITAGT TCCTAATGAG ATAAACTTGG GACCAAACCG    240
ATTCTCTTGT TTTTAGTGCT CAAAATAGT TTCATTTTGA GGTATTTATG CTTTAGTGGC    300
CTTTCTCGAG                    310
```

(2) INFORMATION FOR SEQ ID NO:758:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:758:

```
GAATTCGGCC AAAGAGGCCT AAGAAAAGAA AGCAAGAACA GAAAACGAAG CCACAGGAAG    60
GGAAGTAGAC ATTGTATGCT TATGGTTTCT CATTATGAAG GTGCAGCTTG TAGGAGGTTT    120
GTACGGATGT GCTTTGAAGT TATGTATATT ACATATAACA GGAAAAATA TTAAATAAAA    180
CAGTGCTGGT CTCGAG                    196
```

(2) INFORMATION FOR SEQ ID NO:759:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:759:

```

GAATTCGGCC TTCATGGCCT ACAGCAAATC TGCCTTCACA TGGTCTGCAT TCTAGTGGAG      60
AAGTCAGATA GAGGTAAGTA CGAAGACCAC AAAGCAGGTT AAAAAGTAAG GTGGGAAAGG      120
GATGCTATTT TAGACAAGGT GGTCAAGGCA AGCCTCTCAG AAGAGGGGAT AAGTGCTCAG      180
AGACCTGACT GAAGTGAGAG TGAGCTATTG ACACGGAGAA GGGCATTTC AACTCTGAAG      240
AGAAAGCAGG GGCAGGCTTT GGAGGGAGAG CTTGTTTATG TAGACAAGGA GGGGCAAAGA      300
GTCTTGTTGA TAAAGCAGAA TGAACAAGAG TAAATGGGAT TGTAATGAA ATGACTCGAG      360

```

(2) INFORMATION FOR SEQ ID NO:760:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 192 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:760:

```

GGACATATGC AGTCAAAAGT AGGTGCCCAT ATATATAATG AAATACCAA AGGACAATTT      60
AGAAGGTGA ATGGAAACAT TATGGCATGC TTTAGACGTT CTGTTTGGT TTTCTTATTC      120
CCAGTCTTTG ATCTTTTAGG TCTATCCATT GGTAAAGATA TATTAGGACT CACATCAACT      180
CAAGGTCTCG AG                                     192

```

(2) INFORMATION FOR SEQ ID NO:761:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:761:

```

GAATTCGGCC TTCATGGCCT AGTTTATTGC TCCCAACTAT ACATCTTCAG ACTTCACTTA      60
GCATGTTACG GGTGGTTAGG TTCCAGGATT ATTGAGATCT ATTTCTACTC ACAATTGCTT      120
ATAAAATGAA ATCTATCGTC ACCTTAATTG CCTGTGCCTA AAAATATAGC ATGCTTGTCT      180
TGTGGGAAAT ATTCAGCCTG GTATGTGAGT GACTGAAATG CAACTCCGTG GAAACACCCC      240
AACTCCACAC ATTCATCCCC TTGGTAACTC AGCACAGTCA CAGAACTGA AGAAGTAAAA      300
TGATCCTCTT TATTGGCTT CTCGAG                                     326

```

(2) INFORMATION FOR SEQ ID NO:762:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:762:

```

GAATTCGGCC TTCATGGCCT ACTGGCCCAA GTGAACTTT TAACAGGCTT TTTGGAGATC      60
TCTTTAGCTA GATCCAAAAA TTCATCAGGT ATATTTTCTG TTTTCCAAGT TCATGCAGGC      120
AATAGCTTTG CTAATATATA ATACTAGTTG CCTGTTCAG GCTGCCATAT CAGTTTCATC      180
ATCCTTTCC CAGTGCCAC TCGAG                                     205

```

(2) INFORMATION FOR SEQ ID NO:763:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:763:

GAATTCGGCC TTCATGGCCT AAAAATGAAT ATATTCCTAT CCTATATTAA GACACTTTCC	60
CTAACCTAAA AGTTTATTCT GTTTTAAAA TAAATGAAAG TATTTGTATG GGCCCTGGGC	120
CTGACGGAGA TATGCCCTGC CCCCTCTCTA GAGTGCTGGG AATTCTCAGG TGACCCAGTC	180
CCACAGGCAG CCAAGTGCCC ACACATTTC AGGCTGCCCT CCACCAGGGC AGCGACCTCG	240
GGTCACCAGG GACACGCACA CCTAGAAAGC CGTGGGCTCC TCGAG	285

(2) INFORMATION FOR SEQ ID NO:764:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:764:

AAATCTTTAT CATTCAGAT ATTAAGGATT TCAGATTTTA AGAGTTATCA GTGAAACTGT	60
GTTACAAGAA TATTTGTTC CTGAGACATC TCAGTATTAT AGGTGGCTTC AGACTAACAG	120
GCACAGAATA GGATAGTGTG AAGTATCTGA TTAGCTTTAC TGTACTTGGT ACCTTTAGGA	180
CGTTCAGCCA GAGGTGATTG GAGGGATTG CACGTCTACC ACTCGTGTGT GTATCTGTGA	240
ACCATATCTC CTTTAGTGCC TGCTTTTGAA CTTTATATAA ACAGAATGAT GCTGCCTGTT	300
TATCTCTATA ATTTCTTCT TTCCCTTAGC ACGTGCTCAC TCGAG	345

(2) INFORMATION FOR SEQ ID NO:765:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:765:

GAATTCGGCC TTCATGGCCT AGAGAATGTT TTCATGTTAC TTATACTAAC ATTAGTTCTT	60
CTATAGGGTG ATAGATTGGT CCAATTGGGT GTATCTCGAG	100

(2) INFORMATION FOR SEQ ID NO:766:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:766:

```

GGATTGAATT CTAGACCCTG CCTCGTCATT GTGGAACCCA TGGAGCAGTT TGATGATGAA      60
GATGGCCTTGC CAGAGAAGCT GATGCAGAAA ACTCAACAAT ATCATAAGGA AAGAGAACAA      120
CCACCACGTT TTGCTCAACC TGGGACATTT GAATTTGAGT ATGCATCTCG ATGGAAGGCT      180
CTTGATGAAA TGGAAAAGCA GCAGCGTGAG CAGGTTGATA GAAACATCAG AGAAGCCAAA      240
GAGAACTGG AGGCAGAAAT GGAAGCAGCT AGGCATGAAC ACCAATTAAT GCTAATGAGG      300
CAAGATCTAA TGAGGCGTCA AGAAGAACTC GAG                                     333

```

(2) INFORMATION FOR SEQ ID NO:767:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:767:

```

GAATTCGGCC TTCATGGCCT AGATAATATT TTATGTTTAT TGTGTGTTAG ACTGTGTTGA      60
AGTGGAAACT TTGGAACATT GTTGAACCA GTAAGAATCC CATTCTCTAG GTATCAGGTC      120
GTTAAAGTAG TTTAAATATA CGTATTCCTT AATTTTCCTC AGCAGGTTCC CCCTCCCTTT      180
AACTTGTGTG TATAAATATA TGTGTGTGAT GTTTTCTCTT ACAAAGATAG TACTCGAG      238

```

(2) INFORMATION FOR SEQ ID NO:768:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:768:

```

GAATTCGGCC TTCATGGCCT AGGGATCCCA CCTTTTACAT CCTAGGTGTG AACAGATTCA      60
AATCCACTAT TCCTCCAGAT TTTATAGATG AGGAAACCAA GGTGCACAAG AGGGATTTTT      120
TTGTTTTGTT TTTTGTTTTT GTTGTTTTTT GAGACAGGAT TTGCTTTGT TGCCCAAGGT      180
GGAATGCAGT GGCACAAACA TGGCTCGCTG CAGTCTCGAA CTCCTACGCT CGAG          234

```

(2) INFORMATION FOR SEQ ID NO:769:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:769:

```

GAATTCGGCC TTCATGGCCT ACGGAATGAG AAGATGAAAA ATCAAATTAA GCAGATGATG      60

```

```

GATGTCTCTC GGACACAGAC TGCAATATCG GTAGTTGAAG AGGATCTAAA GCTTTTACAG      120
CTTAAGCTAA GAGCCTCCGT GTCCACTAAA TGTAACCTGG AAGACCAGGT AAAGAAATTG      180
GAAGATGACC GCAACTCACT ACAAGCTGCC AAAGCTGGAC TGGAAAGATGA ATGCAAAACC      240
TTGAGGCAGA AAGTGAGAT TCTGAATGAG CTCTATCAGC AGAATCTCGA G          291

```

(2) INFORMATION FOR SEQ ID NO:770:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:770:

```

CGCTGCGTGC TTGTGAGACT GCCTGTTCTG GGACCAGCCC CTGGGCTCTT CCACCAAGAT      60
TTGGTGAGGG TCCCCCTCTG CCTCTCACAG AAGCCCCTGG CCCTGGACTG TCCTGGGGGC      120
AGGGACACCT GTGGCTGGGG AAGGGATGGC CAACAGCGGG AAGCAGTTTG CGCCTGGTGC      180
CTGATGATGG TGAACCACGA GACAGATGGA GACGGGAGTC AGGGGACCCT GGGGACCCTT      240
CCAGGTCCAG TGACCTTTTC CCAGACAGGC ACTCTCCAGG CCTAGGACAG ACAGGGCCCC      300
AACTCCTCAT CACCCCATGA CTTGGCCTGG AGGAACCTGG GGTGGGAAC AAGTAGTCCC      360
CCAACCTCAG AGGCCAGAAC CACAGGTGGG GGACAGGGAC CTCGACAGAG CTGTGCCTGC      420
TCAACGCTCG AG          432

```

(2) INFORMATION FOR SEQ ID NO:771:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:771:

```

GGTGTGGCTT TGCCCCGTAC GAGCGGCGCG CCATGGAGTT ACTGAAGGTC TCCAAGGACA      60
AACGGGCCCT CAAATTATC AAGAAAAGGG TGGGACGCA CATCCGCGCC AAGAGGAAGC      120
GGGAGGAGCT GAGCAACGTA CTGGCCGCCA TGAGGAAAGC TGCTGCCAAG AAAGACTGAG      180
CCCCTCCCCT GCCCTCTCCC TGAATAAAG AACAGCTTGA CAGAAGCCCT GGCTCTCCTG      240
CTGTCCGTGG GTGGGTGTGG GTGTGTCGGG GGCCCGCAGT CCCGTGTCTG GTGCCCGCTC      300
TGAGCCACAC CCTCTCCGGG TGCTGCCTGG TCGTGAATCA AAAGCCGTGG CCCGCCACC      360
CTTCCCGGG CAGCAGGTGA GGAAGCCGCT GTACTCGAG          399

```

(2) INFORMATION FOR SEQ ID NO:772:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 520 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:772:

```

GAATTCGGCC TCCATGGCCT ACAAGAAAAA AGAAAAGAAA TCATTAACCC CAGCTGTGCC      60

```

```

AGTTGAATCT AAACCGGATA AACCATCGGG AAAGTCAGGC ATGGATGCTG CTTTGGATGA 120
CTTAATAGAT ACTTTAGGAG GACCTGAAGA AACTGAAGAA GAAAATACAA CGTATACTGG 180
ACCAGAAGTT TCAGATCCAA TGAGTTCCAC CTACATAGAG GAATTGGGTA AAAGAGAAGT 240
CACAATTCCT CCAAAATATA GGGAATATT GGCTAAAAAG GAAGGGATCA CAGGGCCTCC 300
TGCAGACTCT TCGAAACCCA TAGGGCCAGA TGATGCTATA GACGCCTTGT CATCTGACTT 360
CACCTGTGGG TCGCCTACAG CTGCTGGAAA GAAAAGTAA AAAGAGGAAT CTACAGAAGT 420
TTTAAAGCT CAGTCAGCAG GGACAGTCAG AAGTGGTGCT CCACCCCAAG AGAAGAAAAG 480
AAAGGTGGAG AAGGATACAA TGAGTGATCA AGCACTCGAG 520

```

(2) INFORMATION FOR SEQ ID NO:773:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:773:

```

GAATTCGGCC AAAGAGGCCT AGTTTATTGT TTGCATATAT TTTATAGTGT AGAGATTAGG 60
CATTTTAATA AAATTTTAAA ATTTCAGGA TCTTACAGAA TGCTTTTATG TTACAGCTTA 120
CTCCTCGAG 129

```

(2) INFORMATION FOR SEQ ID NO:774:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:774:

```

GAATTCGGCC TTCATGGCCT ACACAACGGA AAGCTGTTTT TCTGATCGAG GCTCTCTGAA 60
GAGCATAATG CAGTCCAACA CATTAAACCA AGATGAGGAT GTGCAGCGGG ACCTGGAGCA 120
CAGCCTGCAG ATGGAAGCTT ACGAGAGGAG GATTCGGAGG CTGGAACAGG AGAAGCTGGA 180
GCTGAGCAGG AAGCTGCAAG AGTCCACCCA GACCGTGCAG TCCCTCCACG GCTCATCTCG 240
GGCCCTCAGC AATTCAAACC GAGATAAAGA AATCAAAAAG CTAATGAAG AAATCGAACG 300
CTTGAAGAAT AAAATAGCAG ATTCAAACAG GCTCGAG 337

```

(2) INFORMATION FOR SEQ ID NO:775:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:775:

```

GAATTCGGCC AAAGAGGCCT AGTGAGCGCG ACCATCATGT CCATGCTCGT GGTCTTTCTC 60
TTGCTGTGGG GTGTACCTG GGGCCAGTG ACAGAAGCAG CCATATTTTA TGAGACGCAG 120
CCCAGCCTGT GGGCAGAGTC CGAATCACTG CTGAAACCCT TGGCCAATGT GACGCTGACG 180

```

TGCCAGGCCC GCCTGGAGAC TCCAGACTTC CAGCTGTTCA AGAATGGGGT GGCCAGGAG 240
CCTGTGCACC TTGACTCACC TGCCATCAAG CACCAG 276

(2) INFORMATION FOR SEQ ID NO:776:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:776:

GAATTCGGCC AAAGAGGCCT ATGAAATAGA AGAAGGTAAA AATAAGGAAC AAGCAATAAA 60
CAGTTCAGAG AACATAATGG ACATCAATGA GGAACCAGGA ACAACTGAAG GTGAAGAAAT 120
CACTGAGTCA AGTAGCACTG AAGAAATGGA GGTGAGAAGT GTGGTGGCTG ATACTGACCA 180
AAAGGCTTTA GGAAGTGAAG TTCAGGATGC TTCTAAAGTC ACTACTCAGA TAGATAAAGA 240
GAAAAAAGAA ATTCCAGTGT CAATTAAAAA AGAGCCTGAA GTTACTGTAG TTTACAGCC 300
CACTGAACCT CAGCCTGTTT TAATACCCAG TATTAATATC AACTCTGACA GTGGAGAAAA 360
TAAAGAAGAA ATAGGTTCTT TATCAAAAAC TGAACTATT CTGCCACCAG AATCTGAGAA 420
TCCAAAGGAA AATGATAATG ATTCAGGCAC TGGTCCACT GCTGATACTA GCAGTATTGA 480
CTTGAATTTA TCCATCTCTA GCTTTCTAAG TAAACTAAA GACAGTGGAT CGATATCTTT 540
ACAAGAAACA AGAAGACAAA AGAAAACATT GAAGAAAACA CTCGAG 586

(2) INFORMATION FOR SEQ ID NO:777:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:777:

GAATTCGGCC TTCATGGCCT AGTTTATATA GAGTAGGTTT ACATAGAAAA GGAAAGTTCA 60
CTGAGATTTC TAGGTACAAG ATCTANCAAC ATGCACAAAC CAATATTGTT TATGTATAAC 120
AGCTTCAAAC AATTAGAAAT TGTAATAACC ATTATGAAAG TGATGAAAAT TGTATTGCTT 180
AGTATTCTAC CAAAATTATT AAGTAATTTT TTTTITTTTT TTTNANACGG AGTCCCGCCT 240
GGGCCACAAG NGCNAAAATT TGTTTCNAAA AAAAAAAGA AAAGAAAGAA AAAAAATTGA 300
ACTCTCAATC CCTAGATGTA AAATCAACCT CGTGTCTCTG ATTTACCAG TAATTCATAA 360
CCACAACCTGT TGTGTCTTGA AACTTACTA TGCTTGGCAT ACTTATAATT TTTATTTTAC 420
TTTATCTCTA AATTTAAGAT GAAGTTTCTC CTACTAACTC GAG 463

(2) INFORMATION FOR SEQ ID NO:778:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:778:

```

GAATTCGGCC TTCATGGCCT AGCTGGGAGT TACCTGNTAT CCTGATGGTG CCATGTGCTA      60
GCTGGGTGAC AATAACCCAG CCACCTAACA TCTCAAAGAT TGTTCCTTTT TGTGTGAAAT      120
AGGGATAGAG TTGTCTACTT CCCAGAGCCA GATAGAGAAC TTAAGAGATG AATCTGAAAA      180
TACAATAGCC TAAATAAATT CAAGGAAACA CTATTATCTT ACTGGATCTT TCCAGCAACC      240
ATGTTACTTT TGGCTGGATT TTGTATTTTC CAATTGTGA ATGACACAAC AAAGAGCTAG      300
GTAGGTTAAG TAAATGGTTT CAGATAATAA GCCCAGTTAG CCCAGACGTT TATTTTCCAT      360
TTGCATAGAA AATGAATGTT TTATGCATAC ATTTGTTTGC CCAGGGCTAG GATATTACTT      420
GCATATGATG TTCTTATATA ATTAAAAAAA AGAATACAAC CTCGAG                      466

```

(2) INFORMATION FOR SEQ ID NO:779:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:779:

```

GAATTCGGCC TTCATGGCCT AATTCACAG GGAAATGGGC AGACTGAACC AGTCCAGGTG      60
GTGAATTTTC CAAGAACATA GTTTAAGTTG ATTAAAAATG CTTTTAGAAT GCAGGAGCCT      120
ACTTCTAGCT GTATTTTGTG TATGCTTAAA TAAAAATAAA AATTCATAAC CAAAGAGAAAT      180
CCCACATTAG CTTGTTAGTA ATGCTCTGAC CAAGCCGAGA TGCCCATCTT CTTAGTGATG      240
GCGGCGTTAG GGTTTGAGAG AAGGGAATTT GGCTCAACTT CAGTTGAGAG GGTGCAGTCC      300
AGACAGCTTG ACTGCTTTTA AATGACCAA GATGACCTGT GGTAAAGCAAC CTGGGCATCT      360
TAGGAAGCAG TCCCTGGAGA AGGCATGTTT CCAGAAAAGT CTCTGGAGGG ACAAACTCAC      420
TCAGTAAAC ATAATGTATC ATGAAGAAAA CTGATTCTCT ATGACATGAA ATGAAAATTT      480
TAATGCATTG TTATAATTAC TAATGTACGC AGACTCGAG                      519

```

(2) INFORMATION FOR SEQ ID NO:780:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:780:

```

GAATTCGGCC TTCATGGCCT ACTAGACCCC CGCCACAGCA GCCTCTGAAG TTGGACAGCA      60
AAACCATTGC TTTACTACCC ATCGGTGTCC ATTTATAGAA TAATGTGGGA AGAAACAAAC      120
CCGTTTTATG ATTTACTCAT TATCGCCTTT TGACAGCTGT GCTGTAACAC AAGTAGATGC      180
CTGAACCTGA ATTAATCCAC ACATCAGTAA TGTATTCTAT CTCTCTTTAC ATTTTGGTCT      240
CTATACTACA TTATTAATGG GTTTGTGTA CTGTAAAGAA TTTAGCTGTA TCAAACCTAGT      300
GCATGAATAG ATTCTCTCGA G                                     321

```

(2) INFORMATION FOR SEQ ID NO:781:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:781:

```

GAATTCGGCC TTCATGGCCT AAATGGGAAT CATCATTGCA TAACAAACCT AAAGAGAAAA    60
TGAGAACATT TACGAAGAAG AAACAGAGTT ACTGTACCAA GGGCAAAAAG AAAAGAAGGG    120
GGAAAAAAA TAAGTCCATA AAAGAAAAAC AAAAGGAATC CATGAGCCTG GACGACAAGC    180
CGTGGGGGAT GTAAGAAGGT TTGGAACCCA AAAGGCAAGT CTAATCAGCT GGGGTAACAT    240
GGCGAGGCAG TTCCACATGC TGAGACTTGT GGCTACCACA TAAAAAAGA CTGTGCATAT    300
TCTAAATGAC AGCAGTCTCG CAGTGACGTG GATATTCAC TAGAAGCTA TGCAGGCAGG    360
CGTGGGAAAA GCGAAGAGAT GTTGACCAT GCAGCTGCAA TCTTTATGTC TCTACTGGCA    420
CAACCGAAAA GAGTAATGTG GAAATTATCC AGAGAATTTA GGTGAGAAAA ACAGAAGCCA    480
TCAGATTTTC TCCTTTAAAT CTTGAGAGGG GTATACACTC CCCTGGAAAA CCAAGTTGCC    540
TCTCTGCTCA CATCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:782:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:782:

```

GAATTCGGCC TTCATGGCCT AGGGGAGTCC TCATTCTGAC CTCAAAGAAA GGA CTGTATT    60
GTCTGGCTCC ATAATGCAGG GGACACCAAG AGCAACAAC TAAAGCTTTG AAGATGGCCT    120
TAAATATCCC AAACAAATTA AAAGGGAAAG TCCTCCCATA CGAGCATTG AAGGTGCCAT    180
TACCAAAGGA AAACCATATG ATGGCATCAC CACCATCAA GAAATGGGGC GTTCCATTCA    240
TGAGATTCCA AGGCAAGATA TTTTAACTCA GGAAAGTCGG AAAACTCCAG AAGTGGTCCA    300
GAGCACACGG CCGATAATTG AGGGTTCCAT TTCCAGGGC ACACCAATA AGTTTGACAA    360
CAACTCAGGT CAATCTGCCA TCAACACAAA TGTCAAATCC TTAATCACGG GGCCTAGCAA    420
ACTATCCCGT GGAATGCCTC CGCTGGAAAT TGTGCCAGAG AACATAAAG TGGTAGAACG    480
GGGAAAATAT GAGGATGTGA AAGCAGGCGA GACCGTGCCT TCCCGGCACA CGTCAGTGGT    540
AAGCTCTGGC CCCTCCGTTT TTAGGTCCAC ACTGCATGAA GCTCCCAAAG CACAAC TGAG    600
CCCTGGGATT TATGATGACA CCAGTGTCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:783:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:783:

```

AAATGACACT GAATGACACG TTAGCCAAAA CTAACAGAGA ATTATTAGAT GTGAAGAAAA    60
AATTTGAAGA TATAAATCAG GAATTTGTAA AAATAAAGA TAAGAATGAA ATATTAAAAA    120
GAAACCTGGA AAACACTCAG AACCAAAATA AAGCTGAGTA CATCAGCCTG GCAGAGCACG    180
AGGCAAAGAT GAGCTCGCTA AGTCAGAGCA TGAGAAAGGT GCAGGATAGT AATGCTGAAA    240
TCTTGGCCAA CTACAGAAAA GGCCAAGAAG AGATTGTGAC ACTGCATGCC GAAATTAAAG    300
CCCAGAAGAA GGAGCTCGAC ACAATACAAG AATGCATTAA GGTAAAATAT GCCCAATTG    360
TCAGCTTTGA GGAGTGGCAG AGAAAATTTA AAGCAACAGA GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:784:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:784:

GCAGAAAAGT	CAGAACAATT	TGAGGAGCTT	CAAAGCATCC	TTAAGAAAGG	GAAACTAACT	60
TTTGAGAATA	TTATGGAAAA	ACTGCGAATC	AAGTATTCCG	AAATGTACAC	CATAGTCCCT	120
GCAGAGATTG	AATCCAGGT	GGAAGAATGC	AGAAAAGCTT	TAGAAGACAT	AGATGAGAAG	180
ATTAGCAATG	AAGTCTTAAA	AAGCTCACCA	TCATATGCAA	TGAGGAGAAA	AATAGAAGAA	240
ATTAACAATG	GGCTTCATAA	TGTTGAAAAG	ATGTTGCAGC	AGAAAAGCAA	AAATATTGAG	300
AAAGCTCAAG	AAATTCAAAA	GAAATGTGG	GACTCACTCG	AG		342

(2) INFORMATION FOR SEQ ID NO:785:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:785:

GAGATAATGG	ATGAAAGGAT	TCAGAGGAAA	GAGAGAAAC	TAGAGCAACA	ATGTCAGAAA	60
GAAGCCAAGG	AATTTGCCAA	GAAGGTACAA	GAGCTGCAGA	AAAGCAATCA	GGTTGCCTTC	120
CAACATTTC	AAGAACTAGA	TGAGCACATT	AGCTATGTAG	CAACTAAAGT	CTGTCACTTC	180
GGAGACCAGT	TAGAGGGGGT	AAACACACCC	AGACAACGGG	CAGTGGAGGC	TCAGAAATTG	240
ATGAAATACT	TTAATGAGTT	TCTAGATGGA	GAATTGAAAT	CTGATGTTTT	AACAAATTCT	300
GAAGAGATAA	AGGAAGCAGC	AGACATCATT	CAGAAAGTTG	ACCTAATTGC	CCAAGAGTTA	360
CCTTTTGATA	GATTTTCAGA	AGTTAAATCC	AAAATTGCAA	GTAAATACCA	TGATTTAGAA	420
TGCCAGCNGA	TTCAGGAGTA	TACCAGTGCT	CTCGAG			456

(2) INFORMATION FOR SEQ ID NO:786:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:786:

GAATTCGGCC	TTTATGGCCT	AGGGGTGAGA	GTGTAGACGG	CTTTCCAGT	TGTATCCAAG	60
GCAGTCAGAC	AGGGGGATTT	GGGCTGTGTT	GTGCCCCAGC	GCTGCAAGGT	GGCCAACAGC	120
GACGGCGGTC	GGGGGACACC	TGCAGTGAGA	GGCTCCCTC	TCAGCACACT	CGTCTCGCTT	180
CCCTCAGGCT	TTGGCTGATT	TGGATCTGGT	TGCTGAACTT	CCAACAATTC	CTCAAAATCA	240
TCCACAAAGA	ACTCCTTCAG	TGGAGGGCGC	TTTGGCCTCT	TCAGGGTGTT	CAGAAGCTGC	300
TGGATTTTGG	AGGACACTCT	GCTGTTTACA	GGGACACCAT	CTGCTGTTTC	CAGCATGCTC	360
CCGCTGCACC	CCCGAGGAAC	ACTTCTCACA	GAAGCCACCT	GTGGACGCTC	AAAGTACGAA	420
TGCTCCACGA	GGCCCGTGGT	GACATCAGGA	GGGGCAGAAT	GCAGATCTAT	GTGGGTGTGG	480
GCCTCGAG						488

(2) INFORMATION FOR SEQ ID NO:787:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:787:

```

GAATTCGCCT TCATGGCCTA AGTGTCGGGA ACATATGTCA TGATTCTATG TCCAAACAAC      60
AGGCCAACCC TCAGGACAGA CCCC GCCACC CCCCTTCTCT GCAGCTCCTG GCAGGGACGG      120
TGCACAGTGG TGCCGTGTGC AGGGGGCCAG CGCAGCCACT GGGCATCTGG GGCAGCGCTG      180
GTCGCCTGGC CACCTCCTTG CTGGGGCCGC TGGGCCTCCG GCCTAGAAGG ACAGGAAGCC      240
ATCCACCTCA AGGCGCAGGA AGGGGTCCAG CAGGGCCCCG AGCTTCCAGA TGGTGGCACG      300
GCTCAGCAGG GGGGGACCA GCCCCTCGAA GGGCCTGGGG TTCACCATGT ACACGTAGGC      360
GACCAGCAGG GTGCCCAGCA GCAGCCTCAG GATCAGCAGC CTGAGAATCT CCAGCTGGAT      420
GTCCTCCATC TGGTCCCTAG ACCTGCCTCG AG                                     452

```

(2) INFORMATION FOR SEQ ID NO:788:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:788:

```

GAATTCGGCC TTCATGGCCT ACAGGACAGA GGCAAATAGT AGACAAAGGT GAAGCCAAAG      60
GCATAATTAA GGAAGGAAGA ACGATATTAC CAAAAGATGA AACTGAAAAG AAAGTCTTAA      120
CTGTGTCAAA TTCTCAAATT GAAACTGAAA TTGAAGTTCC ATCGTCCGCA GTTCCAGAAC      180
ACAGAATGTA TGAATCAAA AGTCAGGTGG TTCTTGTAGA AAACCTTCAT GTTAACAAAA      240
CAAATGAAAC AATCAGACAT GAAAATAAAC CGTATGTTC TAGTTCAGCA CAAATGACAA      300
GAAGGAAATT CAAAAGGCT AAGCCAAATT TGGGAAGAGC ACACAGTAAG AAAGAGGAAC      360
CAGTTTGTAG AAAAGTCACA AACTCGAG                                     388

```

(2) INFORMATION FOR SEQ ID NO:789:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:789:

```

GCCTGAAGAC ATCAAAAAGG AGGCAGCCCG GGCTTCTAGG AAGATCTGCT TTGTGTGCAA      60
GAAAAGGGGA GCTGCTATCA ACTGCCAGAA GGATCAGTGC CTCAGAAACT TCCATCTGCC      120
TTGTGGCCAA GAAAGGGGTT GCCTTTCACA ATTTTGTGGA GAGTACAAAT CATTTTGTGA      180
CAACATCGC CCAACACAGA ACATCCAACA TGGGCATGTG GGGGAGGAAA GCTGCATCTT      240
ATGTTGTGAA GACTTATCCC AACAGAGTGT TGAGAACATC CAGAGCCCGT GTTGTAGTCA      300
AGCCATCTAC CACCGCAAGT GCATACAGAA ATATGCCAC ACATCAGCAA AGCATTTCCT      360

```


CAAATGTCCA CAGTGTAAAC ATCGAAAAGA GTTCCTCAA GAAATGCTGA GAATGGGAAT 420
TCATATTCCA GACAGAGATG CTGCCTGGGA ACTCGAG 457

(2) INFORMATION FOR SEQ ID NO:790:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:790:

GAATTCGGCC TTCATGGCCT AGCGGCAGCG GCTCTTCAAA GCGGAGCCGG GAGTTTTTGC 60
TACAGTTTTC GCCACCATGA GTCGCAGCTA TAATGATGAG CTGCAGTTCT TGGAGAAGAT 120
CAATAAAAAC TGCTGGAGGA TCAAGAAGGG CTTCGTGCCC AACATGCAGG TTGAAGGTGT 180
TTTCTATGTG AATGATGCTC TGGAGAAATT GATGTTTGAG GAATTAAGGA ATGCCTGTCTG 240
AGGTGGTGGT GTTGGTGGCT TCCTGCCAGC CATGAAACAG ATTGGCAATG TGGCAGCCCT 300
GCCTGGAATT GTTCATCGAT CTATTGGGCT TCCTGATGTC CATTGAGGAT ATGGGTTTGC 360
TATTGGGAAC ATGGCAGCCT TTGATATGAA TGACCCTGAA GCAGTAGTAT CCCCAGGTGG 420
TGTCGGGTTT GACATCAACT GTGGTGTCCG CTTGCTAAGA ACCAATTTAG ATGAAAGTGA 480
TGTCCAGCCT GTGAAGGAGC AACTTGCCCA AGCTATGTTT GACCACATTC CTGTTGGGGT 540
GGGGTCAAAA GGTGTCATCC CAATGAATGA CAAAGACTCG AG 582

(2) INFORMATION FOR SEQ ID NO:791:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:791:

GAATTCGGCC TTCATGGCCT ACATTTTCTG AGAAAGGTTT GGATGACTGA AATATTTCCT 60
CTACAGTCAA GGAAGTTGGC ATGTGGTGGC TGAAAGTGGC CTTTTTTGTG TGGGCTCCAG 120
TTCTCACTGT TCTGCAATGC TCATGGCAAG TTGAATGGTG AGCTAGCTTA TAAATTAAAG 180
AGCTCTGAAC TGTATTGAGA CCGACTGGGT ATCTAGCTTA CTGTTTTAAC ATCATTGTTG 240
AAACCAGACC CTGTAGTCCA GTGGTGTCTG CCTGTTGTGC AAAGTGTCTC TTTTCTCGT 300
GTTTTTGTA AGAGCTTCCA TCTGGGCTGG ACCCAGTTCT TGCACATACA AGACACCGCT 360
GCAGTCAGCT AGGACCTTC CGCCATGTAT TCTATTCTGT AGTAAAGCAT TTCCATCAAC 420
AATGCCTAAT TGTATCTGTT ATTTTGGTT TAACACACAC TGCTCGAG 468

(2) INFORMATION FOR SEQ ID NO:792:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:792:

```

GAATTCGGCC TTCATGGCCT ACGTGGCTAT AACTGGAAAA CTGGATCCGA AATCGACCAG      60
TAAACTGGGT AGCTCGGTCT ACGCCCCGCC CACCACCTT GCTAGCCAAT AGCCTTCACA      120
ACTCTTCTGC CACTCCCGCC CATTCCAGTG CTGTGCCGCT GCTTTTCTT CCACCTCGGAT      180
CTCTTGAGCG CCCTTAGCCC GCTGTATACG CGCCCCTCCT CGGCTTCAGT AGGCAAGAGG      240
GCCATCTGCC CTTCTTCCT GAAGGTAGAG GGGACAACAC CAGCTACGAC GGGGACTCCA      300
GAAGTCCATC TCCCGAACAG CAGCGGGGCG AAAAGAAAGA AAAAGGGTTT CCGAAGACTC      360
CTACTCACAC CCACGCTTTC CCTTAACCCG GAAGTGATT CCGCCCCCTC TCTCCCTCTT      420
CGGTTGATAC TGGAGGAGAA GGACGGCCAG GTCTGGCCCG GCATGCCCTG GGCTTCCGGT      480
GACCTCTGGC CCTTTTCTGT CGTCCACTCT CCGCTCGAG                               519

```

(2) INFORMATION FOR SEQ ID NO:793:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:793:

```

GAATTCGGCC AAAGAGGCCT ACAGAAACAT CCAATTCTCA AACTGAAGCT CGCACTCTCG      60
CCTCCAGCAT GAAAGTCTCT GCCGCCCTTC TGTGCCTGCT GCTCATAGCA GCCACCTTCA      120
TTCCCAAGG GTCGCTCAG CCAGATGCAA TCAATGCCCC AGTCACCTGC TGCTATAACT      180
TCACCAATAG GAAGATCTCA GTGCAGAGGC TCGCAGAGTA TAGAAGAATC ACCAGCAGCA      240
AGTGTCCTAA AGAAGCTGTG ATCTTCAAGA CCATTGTGGC CAAGGAGATC TGTGCTGACC      300
CCAAGCAGAA GTGGGTTCAG GATTCCATGA ACCTCGAG                               338

```

(2) INFORMATION FOR SEQ ID NO:794:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 756 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:794:

```

GAATTCGGCC AAAGAGGCCT ACCAGGATGG TCTCAATCTC CTGACCTCAT GATCTGCCTG      60
CCTCGGCCTC CCAAAGTGCT GGGATTACAG GCGTGAGCCA CCGCACCCGG CCCTAAACCC      120
TAGGTTTTGA CTTCTGTAAG AAGGAAAGAT TTAAACAAAC AAACAAACAT TAAATTACAA      180
CCATAATAAA CAAAAAACA CTAAACTAAA TTACAACCAT AATAAAATCT CCCAAAGTCC      240
GTAGGCACTG ACATATTACA GCCTTGCCAA ATCAGAATAG ATTTCTCATG TGTGTGCAAT      300
TTACCAGACA CAAAGAGTAG CTCAGATCTC ATAGACTCTT CAGATCTTGT AGACTAATTT      360
CAAGTCTTTT TAAAGTTTGG AAAAACATGT GCTATTGGA ATTACGTCAT CCTCGAATAT      420
TAAACCTGAG CTCAAAAACC TATTGTTTGA TATTGGAAT AGTTAACTCC AGTTTTCTTC      480
TATTAAGATA AAATCTTTC ATCATGTCTG TGCCCTCTAA AATAATACTC CTATTGCTTT      540
GTCTTCCCTT TCTCCCTCC TAGTCCTTCT TTAGTCATT CATTAGAAT CAAGTCGCTC      600
ATGAGTTTAA GAATTAGAGC AGCAAGAAAT TGGGCTAGAG ATGTACAAAA GCTTTGGACA      660
ATAGTAGTTT TGCTTGTCCT CATTCTTATT AGAAGTGCTG TTAATTTACT GATAAATCT      720
AGGACGGAAG ACAAATCTTT GCAACTGGTA CTCGAG                               756

```

(2) INFORMATION FOR SEQ ID NO:795:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:795:

```
GAATTCGGCC AAAGAGGCCT ACCAGGAAGC TCTCCTGCTT GTCATGAAGT GAGAACAATG      60
AAAAGTCATA GCAGATACTC AGTTTAACTC TGTGTAGAAC CTATTAGTGT TTGAGCTGTT      120
ATTCAGATTT GAATTCAGAC TGTGTGTTGT TTGCTTATGG AACTGCGCTG TCGTTCTGTC      180
ACTGTAAAT TAATGAGTCT ATAAGGTTTT TCTTCCAGAG GCCATAGGTG ACATCACTAA      240
AATTGCAAGA TAAATTGTAA TCTTTGNTGN TGCTGCACTC CCCAACCTCT CCCCCACCCC      300
CCGTGGTGTG CTGCTTTCTA GATGAGCGTG TTTGGAGCA GGGCCATCTG GGACACTCTA      360
TGCTTTCACC AAGGAAGTGC GATCTGAGCA GCCACAATCC AGCCAAAAGA GGATCGTAGA      420
TATTGCTCT GATCAACTAG ATGAAATAT AGCAGAATGG ATTTAGCCCA CTGCTCTGTT      480
TTATCCAAC TACTCTCTGA CCAGCAATTG GTGCATAATT ATTACAGCAA AAGTTAAGAA      540
ATGAAACTGT AGCAATTATG TAAATGAATG TGTGGCCTC TTAATACCTG TTAAGTAGTG      600
ACTTCTGTG AGGAAGTTAG TTTTGTGTT TGATGAAATG CTCTCGAG      648
```

(2) INFORMATION FOR SEQ ID NO:796:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 610 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:796:

```
GAATTCGGCC AAAGAGGCCT AAGAGGCTGG CCCAGTCCC AAGGAACAAG AGATGGTCAA      60
GTCGCTAGAG ACATATCAGG GGACATTAGG ATTGGGGAAG AACTTGACT GCTAGAATCA      120
GAGGTGGAC ACTATACATA AGAACAGGCT CACATGGGAG GCTGGAGGTG GGTACCCAGC      180
TGCTGTGGAA CGGGTATGGA CAGGTCATAA ACCTAGAGTC AGTGTCTCTG TGGTCTAGC      240
CCATTCAGC ACCCTGCCAC TTGGAGTGA CCCCTCCTAC TCTTCTTAGC GCCTACCTC      300
ATACCTATCT CCCTCCTCCC ATCTCCTAGG GGAAGTGGCG CAAATGGTCT CTCCCTGCCA      360
ATTTTGGTAT CTCTCTGGC CTCTCCAGT CTGCTTACTC CTCTATTTT AAAGTGCCAA      420
ACAAATCCCC TTCCTCTTTC TCAAAGCACA GTAATGTGGC ACTGAGCCCT ACCCAGCACC      480
TCAGTGAAGG GGGCCTGCTT GCTCTTTATT TTGGTCCCGG ATCCTGGGGT GGGGCAGAAA      540
TATTTTCTGG GCTGGGGTAG GAGGAAGGTT GTTGCAGCCA TCTACTGCTG CTGTACCCTA      600
GAAGCTCGAG      610
```

(2) INFORMATION FOR SEQ ID NO:797:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 286 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:797:

```
GAATTCGGCC AAAGAGGCCT AGCCACTATC CTGGTTACTT GTGGATTCAC CAAGCAGTCC      60
AGCAAGTCAT CCGTAGAAAT GAATGTTTGA GGAGTCGTAG TAGTATTTGA GGCAATCTGT      120
TCCTCAATTG CATTTTCACT GTTGCTCATT ATTGTTGTC TCTTGGCACA ATGCAATTTT      180
CCAAAGTGT CTCCATCCTT GTCCACAAAG TCTTCCCAT CACTTCCAAA TATGCCTCCT      240
```

CTTTCTGAAG GCGGTTCTTC GGACCTCTGT GCTACAGGGA CTCGAG

286

(2) INFORMATION FOR SEQ ID NO:798:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:798:

GAATTCGGCC AAAGAGGCCT AGTTTTTAT TGGTTTGGAG ACTAGAGCCA ATAGTATAAT	60
GTTCTCAAAG GAAACAGACT TGAGTTGTTG GATTAGAGGA ACTAACCCAA CTTATATGAT	120
TTTTTTTTTG TTTTGTCTGT GTAGTTATGG CACTAGTCTC GAG	163

(2) INFORMATION FOR SEQ ID NO:799:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:799:

GAATTCGGCC TTCATGGCCT AGAGGGAATG CGGAGAGGGG TGGAGAAATT CCATCTTTGT	60
TAGGGCAGCA GTCAAGGATG AGTGAGTTAG CCTCTTAAGG AAGAGGCTAA GCTGTTAGAA	120
TAAAGAGGTT TACAACATCA GCGGCTTAAA TCAAATAGAA GTGTGTTTCT CTTTCACATG	180
ACAGAGTAGA TGTGGCCTGG CATCTAGAAA GCATATTGT CTCTGCTCCA CTGTGTCTTC	240
CAGGGACCCA TTCTTCTCTT GTCTTCATGC TCCATCACTT CCTAGGGTGT TGTCTACACC	300
TGCATAGCCA TAGCTAATTT TCCATTCTCA GCACCAACCA GGGGAAGAGG AGGAAAGGTA	360
GCCTCCTTTT CATGATAGGT GTGAAGTTAT GCAGGACACT CTCAGGGTGA ATGGACCACA	420
GTGTGGCTCC TCCTGGGCTC GAG	443

(2) INFORMATION FOR SEQ ID NO:800:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:800:

GCATGTGCAG CGGCAAAGAG AACCCGGACA GTGATGCTGA CTTGGATGTG GATGGGGATG	60
ACACTCTGGA GTATGGGAAG CCACAATACA CAGAGGCTGA TGTCATCCCC TGCACAGGCG	120
AGGAGCCTGG TGAAGCCAAG GAGAGAGAGG CACTTCGGGG CGCAGTCCTA AATGGCGGCC	180
CTCCCAGCAC GCGCATCACA CTTGAGTTCT CTAAATGGGC CAGTGATGAG ATGCCATCCA	240
CCAGCAATGG TGAAGCAGC AAGCAGGAGG CCATGCAGAA GACCTGCAAG AACGGTCGAC	300
TCGAG	305

(2) INFORMATION FOR SEQ ID NO:801:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 464 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:801:

```

GAATTCGGCC AAAGAGGCCT AAACACTCAA ATTTTACATT TTGAGCAGTA TTTACGCCTG      60
AATTAATTCA CAAGTTTCAA GGTCACTAAC TTTGGTTATA TTATATTATT ATTTTCCAAT      120
TTAGCCACCT CTTTATTGTG ATAATAGAGC ATACAGCAGC ACATAAAACG CAAAACCTCTA      180
GGACATAAAA AGTGGCATTG GGACGATGTT GCTCTGAAAT TTATGCATTA ATTAACCCGG      240
TATATATGTA TGCATTAATT AAACCAATAT TTATGAAGTT CCTACTGTGT TACAGACGTG      300
GATCCAGGCA CTGAGGATGC AGCAGGCCAT CCAAATATAA AGTTACTTCC TTAGGAAGCT      360
TCCATTCTAA TGGGAGAGTG TTGTAAAGA GATATATAAT AATATGTAAA ATGAATCCAT      420
AATGGTGAGT ATTATGAAGA ATAAATTGTC CAGGTTTCTT CGAG                        464

```

(2) INFORMATION FOR SEQ ID NO:802:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 650 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:802:

```

GAATTCGGCC AAAGAGGCCT AATCTTCTGC CTGTTCTGAA AAAGCTTTGC TTCTTGATGAT      60
TTGTATCAGC AGGGGGAAAG GTCCTTACTG TTTTCCAGA CCTACAGTTG TGATAGAGGC      120
TCCTCCCAGC CCCGCCACA GACCCCAACA GTGCCCTCTC TCACAAATGG ATTCTGGGGC      180
TTGGTCTTTA TTTTGTGTTT TGTGGGGGCG AGCATATGGA ACCCAAAAAT AGTATCATAG      240
CCTAAATTTG GAGCTTTGTG CCAGCCTTGT CTGTAGGATG ACCCGTGTGG GTCTCACCTG      300
GTGACTGGGA GTCCACAGGG GTCAGTTAGT AGCAGGGAGC TGCAGGGGCG CTGTACAGCA      360
AGACCGTCTC ATTCCCCAAA CCCAGGAGCC AGAGGAACTG ACGCCCGGAT AAATGCCCAA      420
GCCGCCCCGG GTGGGATTAG TCGTCTACCT TCCCAGAAAT ACACCCTCCC ATCCTGTGAC      480
TTGGATACAG TTTACTGATG AAATTAGGGA ACCTCCTGCG CCTTACCAAG AAGCTGTGGC      540
TGGAACCTAG TCAATGAAAA ATGATTGTA AACTCTTGG AGCTGGCTTT GAAAGAATGT      600
TTAAATGAT AGCTGATACT GCCAGACAAC AGAACAGGCC GGCCCTCGAG                        650

```

(2) INFORMATION FOR SEQ ID NO:803:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:803:

```

GAATTCGGCC AAAGAGGCCT AAGAGAACAG GAGCATTACA GTAAAATTCC TAAGTAGCCA      60
ACTGATTGTC AGTGCCAGAA ATGAATACCG ATCCACTCGA G                        101

```

(2) INFORMATION FOR SEQ ID NO:804:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 723 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:804:

```

GAATTCGGCC AAAGAGGCCT AGCTCTCTGT ACCCAAGGAA AGTGCAGCTG AGACTCAGAC      60
AAGATTACAA TGAACCAACT CAGCTTCCTG CTGTTTCTCA TAGCGACCAC CAGAGGATGG      120
AGTACAGATG AGGCTAATAC TTA CTTCAG GAATGGACCT GTTCTTCGTC TCCATCTCTG      180
CCCAGAAGCT GCAAGGAAAT CAAAGACGAA TGTCCTAGTG CATTGATGG CCTGTATTTT      240
CTCCGCACTG AGAATGGTGT TATCTACCAG ACCTTCTGTG ACATGACCTC TGGGGGTGGC      300
GGCTGGACCC TGGTGGCCAG CGTGCAAGAG AATGACATGC GTGGGAAGTG CACGGTGGGC      360
GATCGCTGGT CCAGTCAGCA GGGCAGCAAA GCAGACTACC CAGAGGGGGA CGGCAACTGG      420
GCCAACTACA ACACCTTTGG ATCTGCAGAG GCGGCCACGA GCGATGACTA CAAGAACCTT      480
GGCTACTACG ACATCCAGGC CAAGGACCTG GGCATCTGGC ACGTGCCCAA TAAGTCCCCC      540
ATGCAGCACT GGAGAAACAG CTCCTGCTG AGGTACCGCA CGGACACTGG CTTCTCCAG      600
ACACTGGGAC ATAATCTGTT TGGCATCTAC CAGAAATATC CAGTGAAATA TGGAGAAGGA      660
AAGTGTGGA CTGACAACGG CCCGGTGATC CCTGTGGTCT ATGATTTTGG CGACATCCTC      720
GAG

```

(2) INFORMATION FOR SEQ ID NO:805:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:805:

```

GAATTCGGCC TTCATGGCCT ACGGCCAAG AGGAGGAGAT GCGCCAGTC AGGGAGCGGC      60
CGTGGCCCG ACAGTGAGGA AGCGCAAGG CGGAGCAACC GAGGAATCCT CCGGAGAAGA      120
ATCAGAGCCG TCGCTACCGC CACTACCGCC ACCACCATGG AAGGAGCAAA GCCGACATTG      180
CAGCTCGTGT ACCAGGCAGT GCAGGCGCTT ACCACGACCC AGATCCCAGC GGAAAGGAGC      240
GCGCCTCTTT TTGGCTTGGG GAGCTGCAGC GTTCGGTTCA TGCTGGGAG ATCTCAGACC      300
AGTTGTTACA GATCCGGCAG GATGTGGAGT CATGCTATTT TGCTGCACAG ACCATGAAAA      360
TGAAGATTCA GACCTCATTT TATGAGCTCC CCACAGTACT CTCGAG      406

```

(2) INFORMATION FOR SEQ ID NO:806:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:806:

```

GAATTCGGCC TTCATGGCCT ACGCCCGGT TGAAGTGTG CAGTCAATGA GCTCCCGCTC      60
CTCCTGGATC CGTCTGTAGG TCTCCCCGT GTGCATGAGC AGCTCACTCA CTGGCTTCTT      120
TAGGTGTTG CTGAGGGCTT CTGCTGCTT CTTCGCGAG GCTGTGTTAC GCTGCCAGTT      180

```

```

TTTCAGAAAG TTGTGCTGAG GAGGTGGGGC CCAGGGAGGT CTCTTCTCTT CTTTGGGGC      240
TTTTTGCTTT GACTCTCCTT CAGCAGAGAT GAGGGTCATC AGACAGGGTG AGGTAGGTAT      300
CCGCTCAGCC AGCTGGGTGT TCCCTCGAG                                         329

```

(2) INFORMATION FOR SEQ ID NO:807:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:807:

```

GAATTCGGCC TTCATGGCCT AAGGTACTTT AATCAGTCTA AATACTTGAA CATTTTTATT      60
TCAGTGGTAA AAAATAGACT GAGGCAGAGT GAAGTTATAA ATTAGAATCT AAAAAATTAC      120
CCTTCAACAT TAATATTTTT TAGTGCTCTA ATATAAAACA CAGAAAACCT ATCTCAAATA      180
TAAAAGATGA ATATAAAATT ATTAATTAAA CAACTGGCGC TCGAG                                         225

```

(2) INFORMATION FOR SEQ ID NO:808:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:808:

```

GAATTCGGCC TTCATGGCCT AACTTGCTCT TCTGTTTCTA GTTTTATAAA GTGAAAGCTG      60
CAATCATTGA TTAGAGACAG TTCTACGCTA AAGTCATAAT GACATTTTAT GTAATTTCTT      120
TTTTCTTTTT TTTGAGACAG AGTCTCGCTC TGTGCTCAG GCTGGAGTGC AGTGGAGTGA      180
TCTCAGCTCA CTGCAACCTC TGCCTCCAG GTTCAAGCGA TTCTCCTGCC TCAGCCTCCC      240
GAGTAGCTGG GATTACAGGC CCCCAACCAAC TCGAG                                         275

```

(2) INFORMATION FOR SEQ ID NO:809:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:809:

```

GCGATTGAAT TCTAGTTGCC TACCTACCAA ACTACCTACT GAACTTTTTA ATTTGAAGAT      60
ATTCTTCCTG GACTACTTGT TTATAGTTTA TTAAATGAAC TGCTCTATTT CTAAAAACTT      120
TATTTTAAAA GTCCTTTCCC GTTTAGAATG CGGCATACTC TTGCTTGTGG GGTATATATC      180
TCTGATCGTG ATAACCTACCT ACCGAAAACC TTTCATGGCT CTTTGCCAAC TACAAAATTG      240
CGATATCCTC GAG                                         253

```

(2) INFORMATION FOR SEQ ID NO:810:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:810:

```

GAATTCGGCC TTCATGGCCT AGATTGAATT CTAGACCTGC CGACGCGGGG AGAGACAAAA    60
AAGAGAAAGT CTTTGAAAAG CACAAGGAGA AGAAGGATAA AGAGTCCACA GAAAAGTACA    120
AGGACAGGAA GGACAGAGCC TCAGTGGACT CCACGCAAGA TAAGAAAAAT AAACAGAAGC    180
TCCCCGAGAA GGCTGAAAAG AAGCACGCTG CCGAAGACAA GGCTAAAAGC AAACACAAAG    240
AGAAGTCGGA CAAAGAACAT TCCAAGGAGA GGAAGTCCTC GAG                      283

```

(2) INFORMATION FOR SEQ ID NO:811:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:811:

```

GAATTCGGCC AAAGAGGCCT AGGCTTCCAC CCAGGAAATG ATCCAGAGCC TCTTTTATGT    60
TATGTTTTTT GTTTGTTTCT TTCAAGACAA TCGATCAAGC CAGAGGCATT CCCCACCCTT    120
CAGCAAGACA CTTCCAGTA AGCCCAGCTG GCCTTCAGAG AAAGCAAGGC TCACCTCCAC    180
CCTGCCGGCC CTGACTGCTT TGCAGAAACC TCAAGTCCCA CCCAAACCCA AAGGCCTCCT    240
TGAGGATGAG GCTGATTATG TGGTCCCCGT GGAAGATAAT GATGAAACT ATATTCATCC    300
CACAGAAAAG CTCGAG                      316

```

(2) INFORMATION FOR SEQ ID NO:812:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:812:

```

GGGATGCATA GATTTAGTTC TGCCTCACAG GCAGGTAGCC TGAGCTCCTA GGGGGAAGT    60
TTTTTGCTAA GTAGGGAATG AAAAGCATGT TTATTTAAGC ACAAATTAAT ATCTCTCCTA    120
TTTTTATATG ATTTCCCGTT GTTTTCTTCC CTGTAGGGAA ATCTGCTGTG ATAGAGAAGT    180
GCGTAACAGG CCTTTTCTGT GAGCGCTCAC TCATACATTA TGCACGACGT GGCTAAGATC    240
TTTGATGGCA CTCGAG                      256

```

(2) INFORMATION FOR SEQ ID NO:813:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:813:

```

GCAAGCGGCG CATGCAGGAG GAGAAGCAGA AGTCTGTCAA CGTCAAGAAG ACCATCCTGG      60
AGATGCGCTA CGGGGCTGAT GTGGATGCCG GCTCCATTGT GCACGCCGCC CAGAAGCTGG      120
GCGAGCCTCC CGTGCTGCCC GTATCTCGCA TGGCCTCCAT CCCCTCCATG ATCGGGGAGA      180
AGCTGCCCCAC CGCCAAGGGG TTGGAGGCCG GGCTGGACAC ACCCAAGGTA GCCACCAAAG      240
GCAACTATAT CGAGGTGCGC ACAGGCGCCG GCGGGGACGG TCTGGCTCGG CCCGAGGATG      300
ACCTCCCGGA CCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:814:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:814:

```

GAATTCGGCC TTCATGGCCT ACGAACTCCT GACCTCAAGT GATCGGCCTG CCTCAGCCTC      60
CTAAAGTGCT GGGATAGCCA CTGTGCCCAG CCTAGCCCTT CTTCAAATGT TTGGTAAAAT      120
TCAGCATTGA AGCCATCAGG TCTTGGGCTT TTTGCTGGGA GATTTTTTAT TATGGCATCA      180
ATCTCATTAC TTGTTACTGG CCTGTTTAGG TTTTCAGTTT TTTTCATGGT CAATCTTGGT      240
AGGTTGTTTG TGTCTAGGAA TGTATCTGTT TCTTCTAGGT TTTCCAGTTT CTTGGCGTAT      300
AGTTACTCAT AGTAGCCACT AATTATCCTT TGGATTTCTG CGGTATTGGT TGTAGTGTCC      360
CCATCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:815:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:815:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCAAGCCTAT CTTTGTAGTCT      60
TCCTAGAAGC ACCGTGTTCT GTGGAATCA GCATCAGCAG CTTTGCTGAG GACTCCCCCA      120
TCTTCCTTTC CTTCCCCGGA AAGCACAGAC CTAAGTGAGT CTTCACTGGA TCCCAGCTAA      180
CAGCTTCTGC CCATTCCTAT CTTTCCACAG AGCCAGTGGC AGCCCCAGCT GCAGCAGCTA      240
CGTGACATGG GCATCCAGGA CGATGAGCTG AGCCTGCGGG CCCTGCAGGC CACCGGTGGG      300
GACATCCAAG CAGCCCTGGA GTCATCTTT GCTGGAGGAG CCCCATGAAC TCCCTGCTTC      360
CCCTGAACCC CCAGCACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:816:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:816:

```

GCCACGGTGC TCATTCAGAC TACCCGTGTG CCCAAGCAGG TGGCAGTACC CGCGACAGAC      60
ACCACTGACA AGATGCAGAC CAGCCTGGAT GAAGTCATGA AGACCACCAA GATCATCATT      120
GGCTGCTTTG TGGCAGTGAC TCTGCTAGCT GCCGCCATGT TGATTGTCTT CTATAAACTT      180
CGTAAGCGGC ACCAGCAGCG GAGTACAGTC ACAGCCGCCG GACTGTGTA GATAATCCAG      240
GTGGACGAAG ACATCCAGC TGCAACATCT CGAG                                     274

```

(2) INFORMATION FOR SEQ ID NO:817:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:817:

```

GAATTCGGCC TTCATGGCCT AAAAAATAC ACCTGTGGTC CCAGCTGCTC GGGAGGCTGA      60
NTTACGAGAG TCCCTTGAAC CTGGGAGGCG GAGGTGTCAG TGAGCTGAAA TCATGCCACT      120
GCACTCCAGC CTGGGCAACA GAGCGAGACT CTGTTNAAAA AAAAAAAAT AGCGAGAGAT      180
CGAGAGAGAG TGCACGTGAG AAGACTAGTA GTTGCTATGG ACTGGGGGAG AAGGAACGGG      240
TTACAGGGTT TCTTTTGGGG ATAACGAAAA TGTTCTAAAA CTGGACTGTG GTGATAACTG      300
CACAACTCTG TGAATGTACT AAAAATACT GAACTGGCCG GGCGCGGCAG CTCGAG      356

```

(2) INFORMATION FOR SEQ ID NO:818:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:818:

```

GAATTCGGCC TTCATGGCCT AGGCAGGGTG TCAACTTATT TAATTCTAAA AATAGTATAT      60
TCATAGAGAT ACTATCATCC TCATTTTATA TATTCAAAAA ATTCAAAGAA GTTAAGTAAA      120
TTGCCAAAAG TCACCCAGAT AATAAGTAGA AAAGATGGTA ATGAAATCCA GGTGGCCTT      180
CGAG                                     184

```

(2) INFORMATION FOR SEQ ID NO:819:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:819:

```

GAATTCGGCC TTCATGGCCT ACAACAACAA CAACAAAAAA ACATCATCCG GGAAGCTTT      60
TCAATATCCT GACGTGGGT CTCTCCAGTG TAGATGGAAA TATGGAATTG GGAATAGACA      120
TCGATATTTT TGGAGGTCCC CAGGGGTAC CAATGTGCAG ACAGTTTGG GAACCACTGC      180
ATTAGGCATT TTACATTTAT TTAGGGCTTT CACTGGATT GTACCCCAT ACTTTCATAA      240
TCCATTTTCT CTGATTTTCT TTCTGGTTT TGGTGAGGGT ATAGTTGGGA TGGGGTTTTT      300
TTTTTGTCC TCCCACCGCT CGCCCCATC CAGTGTGGAC GTACTCGAG      349

```

(2) INFORMATION FOR SEQ ID NO:820:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 167 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:820:

```

GAATTCGGCC TTCATGGCCT ACTCTTTCCT TGAAGAATT GTTGAAGACT TCAGAAGTGA      60
TGCTGGCTGC TTTCTTCATT AGGTTGAGCT CCCCATCCTC CTTTACAGCG ATGGTATATG      120
CCCAACTGC ACTGATATCT ATTTGTCAA AGCCTTCAGG TCTCGAG      167

```

(2) INFORMATION FOR SEQ ID NO:821:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 733 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:821:

```

GAATTCGGCC AAAGAGGCCT AGCGAAATAA AACAAAGGGAG TCAGCAAAAC CAGAAATTC      60
AGCAATGTCA GCTCATGACA AGGCTGCATT ATCAGAAGAG GAAGTGGAGA GGAAGTCGAA      120
ATCTATCATT GATGAATTC TACACATTAA TGATTTTAAG GAAGCCATGC AGTGTGTGGA      180
AGAGCTGAAT GCCCAGGGCC TACTACATGT TTTGTGAGA GTGGGAGTGG AGTCCACCCT      240
GGAAAGGAGC CAGATCACCA GGGATCACAT GGGCCAACTA CTCTATCAGC TGGTACAGTC      300
AGAAAACTC AGCAACAGG ACTTTTCAA AGGTTTTCG GAAACTTTGG AATTGGCAGA      360
TGACATGGCC ATTGATATC CCCATATTG GTTGACCTT GCTGAACTGG TGACCCCAT      420
GTAAAAGAA GGTGGAATCT CCATGAGAGA ACTTACCATA GAATTTAGCA AACCTTTACT      480
TCCTGTTGGA AGAGCTGGGG TCTTGCTATC TGAAATATG CACCTACTAT GCAAACAAAT      540
GAGCCATAAG AAAGTGGGAG CTTTATGGAG GGAGGCTGAC CTCAGCTGGA AGGACTTTTT      600
ACCAGAAGGA GAAGATGTAC ATAATTTCT TTTGGAGCAG AAGTTGGACT TCATAGAGTC      660
TGACAGTCCC TGTTCTCTG AAGCACTTTC AAAGAAAGAA CTGTCTGCCG AAGAGCTGTA      720
TAAGCGACTC GAG      733

```

(2) INFORMATION FOR SEQ ID NO:822:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:822:

TGCCAGATAG	TTCTGCAGAA	GAAATCACTG	TTTGTCTGA	GACACAGGTA	AGTTCCTCTG	60
AAACTTTTGA	CCTTGAAAGA	GAAGTCTCTC	CAGGTAGCAG	AGATATCTTG	GATGGAGTCA	120
GAATAATAAT	GGCAGATAAG	GAGGTTGGTA	ACAAGGAAGA	TGCTGAGAAG	GAAGTAGCTA	180
TTTCTACCTT	CTCATCCAGT	AACCAGGTAT	CCTGCCCCGT	ATGTGACCAA	TGCTTTCCAC	240
CCACAAAGAT	TGAACGACAT	GCCATGTACT	GCAATGGTCT	GATGGAGGAA	GATACAGTAT	300
TGACTCGGAG	ACAAAAAGAG	GCCAAGACCA	AGAGTGACAG	TGGGACAGCT	GCCCAGACTT	360
CTCTAGACAT	TGACAAGAAT	GAGAAGTGTT	ACCTCTGTAA	ATCCCTGGTC	CCATTTAGAG	420
AGTATCAGTG	TCATGTGGAC	TCCTGTCTCC	AGCTTGCAAA	GGCTGACCAA	GGAGATGGAC	480
CTGAAGGGAG	TGGAAGAGCA	CGTTCGCTCG	AG			512

(2) INFORMATION FOR SEQ ID NO:823:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:823:

GAATTCGGGC	CTTCATGGCC	TACTCTCATC	TGTATCTGTT	TCCTCTAACT	TTACTGAAAA	60
GATAGAATTC	ATTAAGCATG	AATTCTACCA	TCTTCTCCCT	ACTACAGCTC	TGTCAAAAAG	120
ATGTTGCTCT	CTGAGCCCAA	CTCTCCCTCA	GTCCCCAGGA	TTCTGTCCCT	GTCCACCTTT	180
AATCTTTTCC	TTTCTGATT	TTATGTTATA	AGTTATTTAG	ATTTGATGA	GAGATAATCG	240
TACCTAGAGT	ATGGGAGAAC	TATTTAAGGT	TTACAGGTTG	GGTGGAACCC	TTGTATATAC	300
TAGATGGTAC	TGTGAGGGCT	TGCCACACTG	TCAGCCTTCA	TCTGAACAGA	GCAGAAAGTG	360
TTTCTGCATG	TTCACCAAGC	CCTGCTGGAC	TGTATCACTT	TTCTCTGTGG	GCCAAAACTC	420
GAG						423

(2) INFORMATION FOR SEQ ID NO:824:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:824:

GAATTCGGCC	TTCATGGCCT	AGCGGCCTCA	GATGAATGCG	GCTGTTAAGA	CCTGCAATAA	60
TCCAGAATGG	CTACTCTGAT	CTATGTTGAT	AAGGAAAATG	GAGAACCAGG	CACCCGTGTG	120
GTTGCTAAGG	ATGGGCTGAA	GCTGGGTCT	GGACCTTCAA	TCAAAGCCTT	AGATGGGAGA	180
TCTCAAGTTT	CAACACCACG	TTTTGGCAAA	ACGTTGATG	CCCCACCAGC	CTTACCTAAA	240
GCTACTAGAA	AGGCTTTGGG	AACTGTCAAC	AGAGCTACAG	AAAAGTCTGT	AAAGACCAAG	300
GGACCCCTCA	AACAAAAACA	GCCAAGCTTT	TCTGCCAAAA	AGATGATCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:825:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:825:

```

GAATTCGGCC AAAGAGGCCT AGGAGTAAGG ATGCAGAAAT GATTGCAGCA TATTCATTTC      60
TCTACGCAAG GATGTTCTCT GGAATGGAG GCGACATTGC TGCCTGCTTT TTTGAGGGAA      120
TTGATGATGT TCACTGGAAG GAAATGGGA CATTAGTTCA AGTAGCAACT ATATCAGGAA      180
ACATGTTCAA CCAATGGCA AAGTGGGTGA AACAGGACAA TGAAACAGGA ATTTATTATG      240
AGACATGGAA TGTAAGGCC AGCCAGAAA AGGGGGCAGA GACATGGTTT GATTCTACG      300
ACTGTTCCAA ATTGTGTTA AGGACCTTTA ACAAGTTGGC TGAATTTGGA GCAGAGTTCA      360
AGAACATAGA AACCAACTAT ACAAGAATAT TTCTTTACAG TGGAGAACCT ACTTATCTGG      420
GAAATGAAAC ATCTGTTTTT GGGCCAACAG GAAACAAGAC TCTTGGTTTA GCCATAAAAA      480
GATTTTATTA CCCCTTCAAC CTCGAG                                         506

```

(2) INFORMATION FOR SEQ ID NO:826:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:826:

```

GATGGAGCAG TTCCAGAAGG AGAAGGAGGA ACTGGACAGG GGCTGCCGCG AGTGCAAGCG      60
CAAGGTGGCC GAGTGCCAGA GGAAGCTGAA GGAGCTGGAG GTGGCCGAGG GCGGCAAGGC      120
AGAGCTGGAG CGCCTGCAGG CCGAGGCACA GCAGCTGCGC AAGGAGGAGC GGAGCTGGGA      180
GCAGAAGCTG GAGGAGATGC GCAAGAAGGA GAAGAGCATG CCCTGGAACG TGGACACGCT      240
CAGCAAAGAC GGCTTCAGCA AGAGCATGGT AAATACCAAG CCCGAGAAGA CGGAGGAGGA      300
CTCAGAGGAG GTGAGGGAGC AGAACACAA GCTCGAG                               337

```

(2) INFORMATION FOR SEQ ID NO:827:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:827:

```

GAATTCGGCC AAAGAGGCCT ACAGGTACAG AATCATATGA ATGTTCTTT CTTTCTTTCT      60
TTTCTTTCTT TCTTCTCTTC TTTCTTTCTT TCTTTTTTTG AGACAGAGTC TTGTTCTGTT      120
GCCAGACTGG AGTGCACTGA CTCATCTCA GCTCACTGCA ACCTCCACCT CCCAGTTCA      180
AGCAATTGTC CTCCTCAGC GAGGACCTGC CTCGAG                               216

```

(2) INFORMATION FOR SEQ ID NO:828:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:828:

GAATTCGGCC AAAGAGGCCT AAAAAAAGA AGATGGGTTT TTTAAGTCCA ATATATGTTA	60
TTTTCTTCTT TTTTGGAGTC AAAGTACATT GCCAATATGA AACTTATCAG TGGGATGAAG	120
ACTATGACCA AGAGCCAGAT GATGATTACC AAACAGGATT CCCATTTCTG CAAAATGTAG	180
ACTACGGAGT TCCTTTTCAT CAGTATACTT TAGGCTGTGT CAGTGAATGC TTCTGTCCAA	240
CTAACTTTCC ATCATCAATG TACTGTGATA ATCGCAAAC CAAGACTATC CCAAATATTC	300
CGATGCACAT TCAGCAACTC TACCTTCAGT TCAATGAAAT TGAGGCTGTG ACTGCAAATT	360
CATTCATCAA TGCAACTCAT CTCGAG	386

(2) INFORMATION FOR SEQ ID NO:829:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:829:

GAATTCGGCC AAAGAGGCCT AGCTGAATCC TAGATTTCAG CTTCTCACTC AGAATTTAAG	60
CTGTTTTTCAG TACCAGAAAT ATTTAAGACT GTTAGTTTAA CTTCTAAGAA TAGCAGATAA	120
AGCGTATAGG TGTTTTGAGA TAACCGTATT CATAGGAAAA ACAAACATAA AACTTTCATA	180
ATTTTGGGAA GAGTTACACA CAAAATATC ATCATTGAAT AATTAGTACA ACAAAAATGC	240
ATTTGTTTGT CCTAAAGTT GAAATGAACA GAATCATGAT GGAATACTC GAG	293

(2) INFORMATION FOR SEQ ID NO:830:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:830:

GAATTCGGCC AAAGAGGCCT AATTGAATTC TAGACCTGCC TATGTCCTAT TCCCTGTGTC	60
CTGCAAGACC CCCTTTGGTT TGGTTTTCTT TTCTTTTCTT TTTTCTTTT TTGAGACTGC	120
GTCTTGCTCT GTCTCCAGG CTCGAG	146

(2) INFORMATION FOR SEQ ID NO:831:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:831:

GCGATTGAAT TCTAGACCTG CCTCTCATCC ACTATTGTCT TTCCCAATT TTTTCTAGC	60
CTTATCTTCC AGAATTCCTC TCAGACATAG GTGGCCCTGG TTGCTTGATC CTGTCTCTAA	120

GTTGGTCTTT CATGTTTTCT CTCCTCAGAT TGCTCGAG

158

(2) INFORMATION FOR SEQ ID NO:832:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:832:

GAATTCGGCC TTCATGGCCT AGCTGATTTA AATCTAAAAA CTGGATAAGA AGCTGTGGCT	60
TGTAATTAAA AATAGACCTT TATTCAC TAG ACCTACAGT TGCTTTTTC ATATGTTAAG	120
AAAAGTTTAA TATCCTGCT CTCTATTTC GTTCTAGGG CACCACTATC AGTTAACCT	180
AAAGATTCT GTGGGTGAAA CCATTTGAT TACCATCTG CTCTGCTGCC AGTTATGGTA	240
ACCAAATCT CTTTGTCTT GGATGCTAAA TCTGTCCACT TGTGCCTTAA CTACATCCTA	300
ACTCCCGTCA ACTCGAG	317

(2) INFORMATION FOR SEQ ID NO:833:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:833:

GAATTCGGCC TTCATGGCCT AGCCCCCGGA GCCCACCACA GTCCCCAGAG TGTGATAAAA	60
ACAATTTTAA TACTTCTTAT CTCTTCTAG TAGTCTACAT CCCATTCCCA GTCTTTCCAA	120
TCATAAAAT TGTTAGTTTA TTTAGTTCAC ACTTGAACGT CCTATGAAAC TGTTTAAAC	180
CTTTTACCTA TCTTGTCTT TGTCATTATT CTTAAGCCAT TGATACAGAA ATCAGAACCA	240
AATTTAATAT TGTTGTGGT ATGAGACAGT TTCTGTCATG TTTTAATTT TTCCTTAAAG	300
TTTACTATG TACTTCATAT ATACCGGCA CTTCTCGAG	339

(2) INFORMATION FOR SEQ ID NO:834:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:834:

GAATTCGGCC TCATGGCCTA TGACTTTTAA GTTCTTATT AACTGAGAA ACACCTAACT	60
ATCCTAATAG AATTAAATTT CCCTAAGTTA TAAGACACTT GAATTTTAA AAAAGAGATA	120
ATTAAATTC TCCTATATTT TATTCATTT ATTTTTCAG TCATGCTCCT TCTGTATCTC	180
CTATATTTTA TTATATTACT TACATGGCTT TATTTTACA ATAACCTTT TTTTCCCTTC	240
TTTTATTTAT TTGTTTATTT TTGGAACAG AGTTTCCTTA TGCTGCCAC GCTGGTCTCTG	300
AGCTCAAGCA ATCTTCACGC CTCAGCTCC CAAAATATA GGACTACAGG CATGAGCCAC	360
TGTGCCTGGC CTAAGCCACT GCACCCGGCG CTCGAG	396

(2) INFORMATION FOR SEQ ID NO:835:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:835:

```

GAATTCGGCC TTCATGGCCT ACTTTTACTC ATGCATAATT TTGTAAATC CTACATTGGT    60
CATTGGGAAA ATATTGATTC ACTGAGTAAT ACAACTCTTC CAAATGTTGA ATGTTTCATT    120
CTACAATATC AGAAACTCAA TTTGTTAATG TTTACTACTAG TCTCATCAGA AATGTCTTTA    180
AGTATTTGTT AACTGGCAAA CTCATAGTGA CGACTACAGG CTTTCCAGAA TTTTCATTTT    240
CATTGAAGT CTGAATTTTA TCAACTATAA ATACTGTCAG TTGTTTCCCT CGAG          294

```

(2) INFORMATION FOR SEQ ID NO:836:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:836:

```

GAATTCGGCC TTCATGGCCT ACTCTGATAC TAACTGTAGT CTACATTAT ACATTGTGTC    60
TGAATGCTGG TTTTGTGGCT TCACTAGCTC CCTTTTCTC TCTCCTTTT TATCCTGTCT    120
TTTGCTGCTG CTTTCCACCT TCTGTCCAGC TCCATCTTCA GACAGCTCCC TGTATAACGC    180
TCCACTTCCT GAGTATTCCA GTTGCCAGCC TCCTTCAGCA CCTCCTCCAT CATACGCTAA    240
AGTCATCTCA GCTCCAGTGT CAGATGCCAC TCCTGATTAT GCTGTAGTGA CTGCTTTGCC    300
ACCTACTTCC ACACCCCTA CACCACCACT GCGACACCCA GCGACACTCG AG          352

```

(2) INFORMATION FOR SEQ ID NO:837:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:837:

```

GAATTCGGCC TTCATGGCCT ACCGGACCTT GAAAATGGAA TGTTCAGAAA CACATGTGCA    60
AGGGAGCTGT GCCAAGCTCA TGTGCGAAC AGGCCTCCTG ATGAAGCTTC TCAGCGAGCA    120
GCAGGAAGCA AAGGCATTGA ATGTAGAAATG GGATACGGAC CAACAAAAAA CAAATTATAT    180
TAATGAGAAC ATGGAACAGA ATGAACAGAA AGAGCAGAAG TCAAGTGAGC TCATGAAAGA    240
AGTTCCAGGA GATGACTATA AGAACAACT CATCTTCGCA ATATCTGTGA CTGTAATACT    300
AATAATTTTG ATTATAATTT TTTGTCTTAT AGAGGTGAAT TCACATATGC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:838:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:838:

```
GAATTCGGCC TTCATGGCCT AAAAAATCTA GTTGAGAAAA AGAAAGAAAC CAAGAAGGCT      60
AATCACAAGG GTTCTGAAAA TAAAACTGAT TTAGATAATT CTATAGGAAT TAAAAAAATG      120
AAAACCTCAT GTAAATTTAA GATAGATTCA AACATAAGTC CGAAGAAGGA TAGCAAAGAA      180
TTTACACAAA AAAATAAGAA AGAGAAAAAA AACATTGTTT AACATACTAC AGACTCTTCT      240
CTCGAAGAAA AACAAAGGAC ATTAGACTCA GGCACCTCTG AAATTGTGAA ATCTCCAGAG      300
ATCGAGTGTT CTAAGACAAG AAGAGAAATG CAATCAGTGG TTCAACTCAT AATGACAAGA      360
GACAGTGATG GTTATGAAAA CTCAACAGAT GGTGAAATGT GTGACAAAGA TGCTCTGGAG      420
GAAGATTCAG AAAGCGTTAG TGAAATAGGA AGTGATGAGG AATCTGAAAA TGAAATTACA      480
AGTGTGGTA GAGCTTCAGG TGATGACGAT GGAAGTGAAG ATGATGAAGA GAAGCTCGAG      540
```

(2) INFORMATION FOR SEQ ID NO:839:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 539 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:839:

```
GAATTCGGCC TTCATGGCCT AGCATTTTCAT CTCTAAATTG GGGAGAATAG AAGCATCTAC      60
TTCATGTAGT AGCCAGGATT AGAAGAGGGA GGAATAACTG GGCCCTGGAT AGAATGTGAT      120
GAATGTATAT TCTTAATGAG AAGTGGAAAT AATTGTGGT TGAGAGCTGT GCCTCAGATC      180
AGAGTGACAG GATACATGGC TAGGCTATAT TTTCCAGCAG ATTAAGAGCT GCAGCCCAAG      240
ACTCTGAAAT ATGAAGAAAA AAGGAGAAGA TGACAGCATA TCTTTTAAA GAAATATTTT      300
CCAGCCAAAT GGTGCAGCAG AGGACTTCCA GGAATTTGTT CTTGTTCTGT ATCAAAGGTG      360
AAGAGTTCGT AGCCTTCAAG GAAACAAGAA ACCATGGGAT GGAGTGAAGG AAGGTGGCCT      420
GGAACCAAGT GCTGAGCCTC TCTGAGCCCC AGTTTCCTCG TCTCTAAAT GGGGCTGATC      480
TCCTCTCCCT CAGACTGTTG TTGCAGGAAT TAAACAGGT GTTGAGTGGG CTGCTCGAG      539
```

(2) INFORMATION FOR SEQ ID NO:840:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:840:

```
TTCCACAGCT CTGATATTCA GTAACCCATG TGGAGAACAA AAGGATTTTG CTCCATGAAG      60
TCTAATTGCC TGCTGAATAA ATAAATAAAT AGATGAAGCA CTGCATGCAT TAAATGAAAG      120
TAAATATTGA CCTGCCACC ATATGTTTGC TGGGGTGCTG GCTGAAGTGT GCTGGCAGGT      180
CCAATCAGTC AGAGTCTGCC AGCCCAGCAA GCAGGAGAGA CAGGAATATC AAAAAGGCGC      240
TCCTGCTTGT GCCTTAATCT TTGTCCAACC CCCAATTCTT CCACCACAGG CCTCGAG      297
```

(2) INFORMATION FOR SEQ ID NO:841:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:841:

```

GAATTCGGCC TTCATGGCCT ACCTTATTAG TGATTGGCGA TTCAGGCCAT GTCATAGGGC      60
CTTTCAGACA AAAGGTTCTT ATCCAGTCA GCTGGCCAAA ACATTAAC TTGATTTCCTT      120
ACCTGCTAC AGCATCTTCT AGAAAGGCAG CAAGATAATA TTGTGGCAGT GCACAGATAA      180
CATCAGGGTA GACTTGACTG GAGAAAACCA AATTCTGCGC TTGCTCCTGT GTGCCCCCAT      240
CCAGCTGTGC ATGCACACAC AGGACACCTT TCTAGTATGA AGAACTTGCA TCATGTCTGC      300
CCTCTATTGA GCACCCCTT CTAGAAATAC TTCCAAGTAT TAGCATGTGA ACTGTTGACT      360
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:842:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:842:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCTG ACTTATGAAT TCTTTCTGTG TGATCGTAAA      60
AGTGCAGAGT TTATTGCAAA GAGAATCTTC ATCTGAATCC TCAGCCTGGG AATCTTCCTC      120
TTCCACCGCC AACTCCTCCA CCCAGTCTGA GTCTACTTCA ATGGCCCGCT CTTCCTCCATC      180
CGCACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:843:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:843:

```

GAATTCGGGC TTCATGGCCT AAGCTCCGCG AGCCCCCTAC AACTCGTTTC CTTCGGTTCA      60
CCTTCGCAGG GCGGCGACTG GCGGCGCGAT GGACCTGACC GGGCTCCTGC TGGACGAAGA      120
AGGCACCTTC TCCCTCGCCG GCTTCCAGGA CTTACGTTT CTCCCAGGAC ACCAGAAGCT      180
GAGTGCCCGG ATCCGAAGGA GGCTCTACTA TGGCTGGGAT TGGGAAGCCG ACTGTAGCCT      240
GGAGGAGCTC TCCAGCCCGG TGGCAGACAT TGCTGTGCAA CTGCTCCAGA AGGCAGCCCC      300
CAGCCCTATT CGCCGACTCC AGAAGAAAATA CGTAGCTCAT GTGTCCCGGG AGGCATGCAT      360
CTCCCATGT GCTATGATGC TGGCTCTGGT GTACATTGAA CGGCTCCGGC ACCGAAACCC      420
AGACTACTTG CAGCATGTGT CATCCTCTGA CTTGTTCTTG ATCTCCATGA TGGTGGCCAG      480
TAAGTACCTC TATGATGAAG GGGAGGAGGA GGAGGTCTTC AACGACGAAT GGGGAGCTGC      540
TGGGGGTGTG GCCGTGCCCA CTCTCAATGC CTTGAGAGG GGCTTCCTGA GTGCCATGGA      600

```

TTGGCATCTC TACACTGAAC GCTCGAG

627

(2) INFORMATION FOR SEQ ID NO:844:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:844:

```

GAATTCGGCC TTCATGGCCT ACCTGAGCTG CCGAAGCCGC CGTCCTGCTC TCCCGCGTGG      60
GCTTCTCTAA TTCCATTGTT TTTTITAGAT TCTCTCGGGC CTAGCCGTCC TTGGAACCCG      120
ATATTCGGGC TGGGCGGTTC CGCGGCCTGG GCCTAGGGGC TTAACAGTAG CAACAGAAGC      180
GGCGGCGGCG GCAGCAGCAG CAGCAGCAAT CTCTTCCCGA ACACGAGCAC CACAGGCGCC      240
CGAAGGCCGG AACAGGCGTT TAGAGAAAAT GGCAGACGAT ATTGATATTG AAGCTCTAGC      300
TCGAG

```

(2) INFORMATION FOR SEQ ID NO:845:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:845:

```

GAATTCGGCC TTCATGGCCT ACCAGAAAAA ACTTACATTG AAGAGAGGAT TCCTTGTTTT      60
GACTATGTGT GTTCTGCGG TCCTAGGCAG CCAACGTATT GGTTTACATG GATCTGGAGG      120
ATTATGCACA CTAGTGTGTA GTTTCATTGC AGGGACAAAA TGGTCCCAAG AAAAGATGAA      180
AGTCCAAAAG ATTATTACGA CTGTATGGGA TATTTTCAA CCACCTCTTT TTGGTTTAGT      240
TGGAGCAGAA GTATCTGTTT CATCGCTTGA ATCAAATATT GTTGGCATAT CTGTTGCCAC      300
TCTAAGTTTG GCATTATGTG TTCGAATTTT AACCAATAT CTATTGATGT GCTTTGCTGG      360
TTTTAGTTTT AAGGAGAAAA TATTATTGTC TTAGCATGCG ATGCTCGAG      409

```

(2) INFORMATION FOR SEQ ID NO:846:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:846:

```

GAATTCGGCC TTCATGGCCT AGGCACGGTA CATAAGATTA TTATAAACAT CAGCTGCGGT      60
TCTGGGAGTG AGCTTGTGTC GTGTTAGTGC CATCTCCCTG ACAAACTCGA CCTGTACCCA      120
CATCTCAGGC TGGGAAGGAG TAGCTGGGCC TCCCTTTAAT GCAGCGGCAC TGGTTTGGGT      180
CACAAGAGCT GGTTTGATCA ACCCCTGACT CCCCTGGCG GGAGGTGCTC GTCACATCTG      240
GGAGCCTGAG CAGAGGTGCC GGGGCTTGG AAGCTGAGA AATGATGGAT CTTTCTCCAG      300
GAGAAACAAT TCTTATCTTC ACATCNGCCC CGTGCTCAA ATGAAGAGCG CGTTTGCTA      360

```

GCTGCTCGAG

370

(2) INFORMATION FOR SEQ ID NO:847:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:847:

```

GAATTCGGCC TTCATGGCCT ACGCGCGGCC GAGCGGAGGC GGAGTCGGCG CCGAGAACAT      60
GGCTGGAGGC AAAGCTGGAA AGGACAGTGG GAAGGCCAAG GCTAAGGCAG TATCTCGCTC      120
ACAGAGAGCT GGGCTACAGT TTCCTGTGGG CCGCATCCAC AGACACTTGA AGACTCGCAC      180
CACAAGCCAT GGAAGGGTGG GTGCCACTGC TGCCGTGTAC AGTGCTGCGA TTCTGGAGTA      240
CCTCACTGCA GAGGTGCTGG AGCTGGCAGG TAATGCTTCT AAGGATCTCA AAGTAAAGCG      300
TATCACTCCG CGTCACTTGC AGCTTGCAAT CCGTGGTGAT GAAGAGTTGG ATTCTCTTAT      360
CAAGGCTACC ATAGCTGGGG GTGGTGTGAT CCCTCACATC CACAAATCTC TGATTGGAAA      420
GAAGGGACAG CAGAAACTG CTTAGAGGGA TGCTTTAACC AACCTCTTCC TTCCCGTCA      480
TTGTACTGTA ACTGGGACCT CGAG                                         504

```

(2) INFORMATION FOR SEQ ID NO:848:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:848:

```

GAATTCGGCC TTCATGGCCT AAACAAGCAG AGGGACTCCC CAGATAGCTT CATACCCAGT      60
TTAGCTTTAT AACAAGTGTA GTTTTAGGCT CTGTCTTGGC ATACTTGAGA GCACAATGGC      120
TGCTTCAAAA CAGGCATTG AACTCGCTGT TTAATCAAAT TCTTCTTTAA TCTAAAGTGA      180
GTTTCTCATA GAGAGCATAT ACACTTAACC CTTGAACAAT GTAGGGGTTG GGGTGGGGAG      240
TCAAGCCCT GTGAAGTAAA AATTGCTAA TAACTTTTGA CTCCCCCAGA ACTTAACAT      300
AAATAGCCTA CTATTGATTG GAAGTGTTAC CAACAGCATA CACAGTTAAC ATATATTTTG      360
TATGTAATAT GTGTTATCCA CTATATTCTT ACAATAAAGT TAGCAAAAGA AAAAAATGTT      420
ATTAGGAATC CTCGAG                                         436

```

(2) INFORMATION FOR SEQ ID NO:849:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:849:

```

GAATTCGGCC TTCATGGCCT ACATGAGCCC AGGAGTTGAA GGCTATAGCC TGGGTGACAC      60
AACAAGGCCC CATCTCTAAA AAATATATAA ATAAATAAAG TTAAGGATGC TCGTGGTTT      120

```

```

ATATGTTTCAG AAAGAGATTG AGGTAATAAA AGAGTTTTTG GCCAGGCTCT GGCTTACACC 180
TCGGCCTCCC AGAGTGCTGG GATTACAGGC ATGAGCCACC GCGCCCAGCC GGAAGTAGGT 240
TTTTTGAAGA GTCAGCTGAA AACAACTGTT GCCGTATTTC GAATTTAAAA TTTTAATTG 300
AAAATATTAT AACTGAGAAA TTATTGTATA TATTATGGT ATACAGCGTG ATGTTATGAT 360
ACATGTATAC AATGCAGAA GATTAAATCA AGCTATTTAA CATAGCTGTC ACCTCAAATA 420
CTATTTTGT GGTGAGAAAT TTGAAATTTA TTATCTCAGG AATTTTGAAA TGTACAATAC 480
ATTATTATTA ACTGTTCTCG AG 502

```

(2) INFORMATION FOR SEQ ID NO:850:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 291 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:850:

```

GAATTCGGCC TTCATGGCCT AGATAAAAAG AAACAAAAAA GAGAAGATAT GATAAGAGAA 60
CAGAAGATAT ACCATAAATA TTTGGCACAG AGACGTGAGG AAGAAAAAGC TCAGGAGAAA 120
GAATTTGACA GAATATTAGA GGAAGACAAG GCAAAGAAGT TGGCTGAGAA GGACAAGGAG 180
CTGAGACTTG AAAAGGAGGC AAGGAGACAG CTTGTGGATG AGGTCATGTG TACAAGAAAA 240
CTTCAAGTTC AAGAAAAGTT GCAACGAGAA GCTAAAGAAC AGGAACTCGA G 291

```

(2) INFORMATION FOR SEQ ID NO:851:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 311 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:851:

```

GGTTCGTAT TCTGTTGGTT GGAGTGTCT ACTATTGTG GGTGGAGTGT TCTATCTCT 60
GTTGGGTGGA GTGTTCTGCT GTGTTGGGT GCGGTGTTGT ATATTCTGTT GTTGGGTGGC 120
GTGTTGTATA TTCTGTTGTT GGGTGGCGTG TTCTATCTTC TGTGTTGGG TGGATGGATT 180
GTTCTGTATT CTGTTGGGTG GCATGTTCTA TCTTCTGTTT TTGGGTGGAG CGTCTATCT 240
TCTGTTGGGT GCGCATTCT ATATTCTGTT GTTGGGTGGC GTGTTCTGTA TTCTGTTGTG 300
GGTGGCTCGA G 311

```

(2) INFORMATION FOR SEQ ID NO:852:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 532 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:852:

```

GAATTCGGCC CTTATGGCC TAGTCTCATC TCAGAGTACT CAGAGAACT ATTTTAAAT 60
CTCTAGATAT CAATCAATGA ATATTATTA TAAATACCT GCTATGTGCC AGATGGTGT 120

```

```

AATTATAAGT TTGTTCTCTT TTTGTCGTGC TACTTAGGCT TTTATCATTT TGTCTATCA 180
TTAGGGAAGT GGCTCCNNNN CTTACAGCTA ATTTTCTTTT CAATTTACTA ATGACTTTT 240
GTGGAGGTGG GGATCTCTTC TGTCAACAT TTTCTATGAT TCATCTCAAT CCTCCAGTGA 300
TTATTAAAAA ACAGTTGCAG TAAGTTCAGT CATAGGGGCA CTGGAATGAG TCCTTAAAC 360
TTTATGCTGC TGCTTTTGCA ATGATGGATT GCCTGAGAAT TAAGGAAAGA TAACTACTCT 420
CTTGGTCACT GTATTCCAA TCAACCATAT CCTCCCAGAA TATGATTCT TCCCTCAGGC 480
ATTTTAGAAA AGAGACAAGA GACAGATTTT TTTTTCAGG CAATGACTCG AG 532

```

(2) INFORMATION FOR SEQ ID NO:853:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:853:

```

GAATTCGGCC TTCATGGCCT ACTTTTGGAT AAGCAACTAG TGGTCTCATT ATCAGAGGTC 60
CCTGAGGGGC CCTACAGGCC CCCCCAGGTT CTGCCCCCAA GATTCTAAGA GAGACCTTGT 120
GCTAGGGCTC TAGTCTTGAT GTTCTTTGCA TTGTTTGGAT ATGAAGCCCA GGATATGTGG 180
GCACAATAAG GTAAATCATG AGATGTGAAG GAGAATGAAG ATCAGGCCAG AGGTCACCAT 240
TCATTGAAGA GCCAGAGAAA AAGAAAATTA GTGCACAGAT TTGTGTAGAT TTACAGAGAA 300
CTTCTATTG CTGCAAGAAC TTCATCAGGC GCTGCACCAT GCCTGATTG GAAAGGAGCT 360
TCTTTGGGGC CTGATAGAAC TGAATTAATA TGAAGAAATT GAAGTGGCTC TCGAG 415

```

(2) INFORMATION FOR SEQ ID NO:854:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:854:

```

GAATTCGGCC TTCATGGCCT AGTAAAATTA GCTGAAAAAT AATTTTCCAA TGCAAACTACT 60
AATGAGGGTT ATATGACCGT TGTCCAAAGC ATTTGCAGTG CTGCATGACA TTTGTCCTAA 120
AACCTGACTC TTA AACATT CCTTGTGAAA ATAGAAATAT TCCCATGCCT AGATTCCAAA 180
TAATAAAAGA CACTGAGAGT GTTTTCAAAA TTAATGGACT GATTTAAATT TCACTGGAAA 240
GCAGCTTTTT AAAACTAAAT TGTCTGGATG TGGCCTCCCT GTGATCACTT CCAACTGCTT 300
ACTGCCAACT TCTGGCGGCT CGAG 324

```

(2) INFORMATION FOR SEQ ID NO:855:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 616 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:855:

```

GAATTCGGCC TTCATGGCCT AACGGCCTTC AGATGGAAGG AGGGCAGGTG CATATCTGTT      60
AGCAAAATCT TCACAATCAT CTTGAGTTTC TCAGCAAAGT CGGCCTGGCT GGAAATTCCT      120
GGCGCTGCCA TGCTGAAGGT GACCAGCAAC ACAGCCCCCA GGATGGTCAG TTGTTCCAGC      180
TGCAACTGGA GCTCGTGGAA GCGAGACTGG TCCATTAAAA CTGTTTCGGG GAACGGCCTC      240
TGGAGGTGGT CCCACTTCAG AAGCTTCAGG TAAGCGTAAT TCTGGACAGC AACAGGGCTC      300
AGCCTGGGCA TGTCCCCAGA GCCAGCAGCC ATTCCCCCCA CTGGCAGGGC GTGTTTATAC      360
TTCTGAGTCA TAAGGTCCTC TGAGGCTTCT TCCAGCCACT GGGTGACAAA GTCCAGGGAA      420
TTTGGTTGCC TCTCCAAAAT CTCTTGAAAC TTCTTCCTTT CGTATTCAAC TGACTGCTGC      480
ATGAGATGAG GCCTGATGCT ACTGATAGCA AAGTTGGCCA TGTCCACTTT CATTAGGTCC      540
AACACAGAAA AAATTTCTCT GAAAAGGGGC ACTATTCTCT TAATGTCCTT TAGTTCTTAA      600
ACTTCCTCAT CTCGAG                                     616

```

(2) INFORMATION FOR SEQ ID NO:856:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:856:

```

GCTCTGGGTG AAAAGATCTC ACACCAATGT ACATAATGTG GCCATCCTTT CCATTTTCAA      60
GAAGTTGCCT TGCTTTGATA CTGCAAATTC AGTATTTGTA CACTGGAATG ATAAAAAGAT      120
GTTCCACTTT CTTTTCAGCC AGAAAGCTTC CTCGTGTGTG GTGTGCGTGT GTGTCCCATC      180
CTATTGCCTG TTCTTTCTAA ATCTACATTT TGTTACCTTA TCCAATACTT GCTTTAGCAA      240
GAACATTATG GGGCCACCA TATTCCACAG GGCCATGCCA ACCTTTGGAA AAAAGGTAGG      300
TCAAGGAAGA AATCAGAAC AACCCTGTGA CCATTCCACC TCCTTGATC TTGGGCTTGG      360
GTTTGGAAC TGACCAGCA GCTGGAGCTG CCACCACAGA GAAACATCA AGCAAAAGGG      420
TTCCAGGACC AGAGATTAGG TAACTAGCTA CAGGCCAGAG GAATGCTTCC CTCTCTAGAT      480
CAACAAGCAC CCTCGAG                                     497

```

(2) INFORMATION FOR SEQ ID NO:857:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:857:

```

GTTTCATGGCC TAGATGCTGG TTTGTTTTTG TTTTCGTTTT TTTGAGACAG TCTTGCTCTG      60
TGACCCGGGC TGGAGTGCAG TGGTGCGATC TCGCTCATTG CAACCTCTGC CTCCCAAGTT      120
CCAGCAAGTC TCCTGCCTCA GCCCCCCACC GAGTAGCTGG GACTACACGC AAGTGCCACC      180
ACGCCAGCT ACTTTTGTG TTTTATAGTAG AGATGGGGTT TCACCATGTT GGCCAGGCTG      240
GACTCGAATT CCTGACCTCG AG                                     262

```

(2) INFORMATION FOR SEQ ID NO:858:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:858:

```

GAAACTATAA TCATCAGTAC TGTAATGAGC AATTATGAGG CCTACAAGCC TTCCACAGGA      60
GCTATGGGAG ATCGACTAAC GGCAATGAAA GCAGCTTTCC AGTCACAGTA CAAGAGTCAC      120
TTTGTTCAG CCAGTTTAAG TAATCAGAAG GCTGGAAGTT CTGCTGCTGG GGCAAGTGGG      180
TGGACTAGTG CAGGGAGCTT GAATTCTGTT CCAACTAACT CAGCACAAAC GGGCCATAAC      240
AGTCCTGACA GCCCCGTAC CAGTGCCGCC AAGGGCATCC CAGGCTTTGG CAATACTGGC      300
AACATCAGTG GTGCCCCGTG GACCTACCCG TCTGCCGGAG CCCAAGGAGT CAACAACACA      360
GCTTCAGGGA ATAACAGCCG AGAAGGGACT GGGGGCAGCA ACGGGAAGAG AGAGAGATAT      420
ACTGAGAACC GGGAACTCGA G

```

(2) INFORMATION FOR SEQ ID NO:859:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:859:

```

GAATTCGGCC TTCATGGCCT ACTGGTCGCC AATGTGCTGC AGGTCATGGC TCCGGAATCA      60
AATTGGGCTC AAACGGGGCA AGCTCCAACA CAGTGGAGCC TGGCGCTACT CCCACCTCCA      120
CCTTGGCGAT CTCAGAGCTG CAGGATGGCT CTGCCCACCG CACCCTGAGC TGGCCCCGCT      180
TGGGGCTGGC ATTGGGGGAC AGTGTGTTCT GGGCGTCTCT GCTCCTCTCT GCTGGTGCCT      240
GTGCCTCTGC TGGCCGCCCA CTCATAGATG TCAGAGCCAC AGGACGGCCC CGCAGAATCC      300
CTGCCCGAC CTTGCCGGGG GCTGGCTTTG GTGCACATGC AACTCGTCAT CGTGGTCCCC      360
ATGGGCACCT CTGCTCTTCT CGAG

```

(2) INFORMATION FOR SEQ ID NO:860:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:860:

```

GAATTCGGCC TTCATGCCTA CGTTTCCCGA GAAACCAAGC CACAAAAAGT ACAGGGCCGC      60
CCTGAAGAAG GAGAAACGAA AGAAACGTCG GCAGGAACTT GCTCGACTGA GAGACTCAGG      120
ACTCTCAGAG AAGGAGGAAG AGGAGGACAC TTTTATTGAA GAACAACAAC TAGAAGAAGA      180
GAAGCTATTG GAAAGAGAGA GGCAAAGATT ACATGAGGAG TGGTTGCTAA GAGAGCAGAA      240
GGCACAAGAA GAATTCAGAA TAAAGAAGGA AAAGGAAGAG GCGGCTAAAA AAACGGCAAG      300
AAGAACAAGA GAGAAAGTTA AAGGAACAAT GGGAAGAACA GCAGAGGAAA GAGAGAGAAG      360
AGGAGGAGCA GAAACGACAG GAGAAGAAAG AAAAAGAGGA AGCTTTGCAG AAGGGCTCGA      420
G

```

(2) INFORMATION FOR SEQ ID NO:861:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:861:

GGATTTCTTT	GGAATGGGCA	AAGAAGTGGG	GAATCTGCTA	CTGGAAAAC	CACAGCTTCT	60
GGAAACCAAA	AACGCCTTGA	ATGTGGTGAA	GAATGACCTG	ATTGCCAAGG	TCGACCAGCT	120
GTCCGGGGAG	CAGGAGGTGC	TGAGGGGCGA	GTTGGAGGCT	GCTAAGCAGG	CCAAAGTCAA	180
GCTGAAAAC	CGTATCAAGG	AGCTGGAAGA	GGAAGTGAAG	AGAGTGAAGT	CCGAGGCCAT	240
CATCGCCCGC	CGTGAACCCA	AAGTTCTCGA	G			271

(2) INFORMATION FOR SEQ ID NO:862:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 288 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:862:

GCGGCTCTTT	GGGAGGTGGT	CAGGGGAAAA	GATGGTCAGT	GCTTTTCTG	GACAAATCCA	60
GGGGCCAATT	GAGGTGGGGA	GTCTATGAGA	AGGGCCCTGT	CAGCTGAGGC	GAGGGAAAGG	120
GCAGAGGACC	TAGAATAAAA	GGATATGGCC	TCTCTGTGCA	CTAGCAGGAT	GGGTAGGAAA	180
GGGAGATATG	AAAAGACGAA	ATGGGGACCG	GGTGCGGTGG	CTCACGCCTG	CAATCCCAGC	240
ACTCTGGGAG	GCCAAGGCAG	GCAGATCACC	CGAAGTCAGG	AGCTCGAG		288

(2) INFORMATION FOR SEQ ID NO:863:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 326 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:863:

GCTCGAGTGG	AATGGGCCGA	GGAGATGGAT	TTGATTCTCG	TGGCAAACGT	GAATTGATA	60
GGCATAGTGG	AAGTGATAGA	TCTTCTTTT	CACATTACAG	TGGCCTGAAG	CACGAGGACA	120
AACGTGGAGG	TAGCGGATCT	CACAACTGGG	GAAGTGTCAA	AGACGAATTA	ACAGAGTCCC	180
CCAAATACAT	TCAGAAACAA	ATATCTTATA	ATTACAGTGA	CTTGATCAA	TCAAATGTGA	240
CTGAGGAAAC	ACCTGAAGGT	GAAGAACATC	ATCCAGTGGC	AGACACTGAA	AATAAGGAGA	300
ATGAAGTTGA	AGAGGCTCTT	CTCGAG				326

(2) INFORMATION FOR SEQ ID NO:864:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 546 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:864:

```

GGAATGGGGA GAGGGATCTA CCAAGGTNAC AGCAGTTTTT TGAGCAGCTG GCACGTGCCT      60
CTGCTGCCAA CATGATGAGG TACAGAACCC AGCACAGGGA ATGCTCAGCC TGTGACTGTG      120
AGCTGGATGT GAGAGTCTCC TGAGGACCCT CGGTATACTC AGAGCATTTC CTCTCAGGGT      180
GCAGGAAGAG GAAAGCAGAG GAAGTGGACT TGAAGGACCA AAGGTGGGAT CCTAGCTGGG      240
CCAATCACTG AGAAGCCATG TGGTCTTGGG CAAGTCATTG CCTTCTCTGA GCCTCAGTTT      300
CCCCATCTGT AAAATGGAGG TAATGATACT ATGCCTACCT CATCATCATG CTGTGAAGAT      360
TAAATGAGTT ATGCCATGGA AGTGCTGTAC ATTACCCATT GATAATGTCT CAGTGGCCTC      420
TCAATGAAAT GGAGTGTGAC AGAGTGCCAC ACTCTGAAAC GGCTCATCCC CGGTGATGGT      480
GCTGGGACTA GAACCCGGGC AACCTCGCAG TGCCATGCC TACTGCATCA CTACGTCCAC      540
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:865:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 808 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:865:

```

GAATTCGGCC AAAGAGGCCT AAGGATTCAT AGTATAAATC TTTAATTTAT CACAGTCTGT      60
ATTAAGTAAT ACTAAACCAC TTCGCATATA AATACATCAC AACAGTATAC TTCCGTTTAT      120
GCTATCTTGG TCTTTGTACT TTTGTTTTTG TACATTTTAC TTTGGCATAA ATGTCAAAGT      180
ACAGTATTGT TATTTAGCTT TAAATATTCA TTTGCCTCTC TCCTTAATGT AAAAAGGCTT      240
CTTCTCAACT TCCTGACATT TCTTGCTAAA CTATACACGT CTGCCCTGTT TTCCAACAGC      300
ACACTGTTCT GTACTGTCCC TTATTTATTT TTTTTTTTTT TTTTTTTTGG AGACGAGCTC      360
GTTCTTTGCC CAGGCCGGAC TGCAGTGGTG CTATTTCCGC TCACTGCAAA CTCTGCTTCC      420
CGGGTTCACG CCATTTCCG GCTTCAGCTT CCCGAGTAGC TGGGACTACA GGCGCCCGCC      480
ACCACGCCCG GCTAATTTTT TGTATTTTTA GTAGAGATGG GGTTCCTCCG TGTTAGCCAG      540
GATGGTCTTG ATCTCCTGAC CTCGTGATCC GCCCACCTCG GCCTCCCAAA GTGCTGGGAT      600
TACAGGCGTG AGCCACCGCA CCTGGCCTAT TCTGTCCCTT TTTAAAGCAG TTCTCTTTTA      660
AAAATTTGTG GTAAGATATA AATCACATAA AATTTGCAGT TATAACCATT TTAAAGTATA      720
TAATTCATG GCATTAATTA CAGTCACAGT CTTTACAAC TATTATTACT ATGTATTCCT      780
AAAGTTTTTT TACCCTCCCC CCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:866:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:866:

```

GAATTCGGCC TTCATGGCCT AAAAGAAAAT GGCTTCAGTA AGTTAGGATG AAAAATGAAA      60
ATATAAAATA AAGAAGAAAA TCTCGGGGAG TTTAAAAAAA ATGCCTCAAT TTGGCAATCT      120
ACCTCCTCTC CCCACCCCAA ACTAAAAAAA GAAAAAAGG TTTTCTAATG AAAATCTTTA      180
AAAATACTGT CAGTATTTTA AAATTTTCAA CAGTATTATA AAAACATTGC ATCTCCCCAC      240
CTCTAATATG CATATATATT TTTCTGCTA AAATTGGTTT CTACAATTGA GTAAATGGCA      300
AATACATGAA GCAATGTCCC TAAATTTTAT AAAGAAATTA TATTTAATGC ACATTCTCGA      360
G

```

(2) INFORMATION FOR SEQ ID NO:867:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 880 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:867:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGAAAA    60
CAGTCTTTTA ACCTTTCAAA ATGCCACAAT GTGCATTTTA GATTGCCCTT AGTTTCCCAA    120
CTCTCAGTAT ATAGAGACTC AATTAGAAAA GAAATGGTGC TAGTAGCTTC AACCCACTGG    180
TATGTATTTG AGGAACTGTT CCTGGTAGAA GGCAGTACCG TGTCCCTTGG TATTGCTACT    240
GTGCCTGCTA TGTACTTCTT TTATGTATAT GATATGGAAG TAACTCCTTT TATACATGTG    300
GAGAAGTTTC ACAGCTTTT TTCATAGTCA TTGCATTAAA ATGTCTGCTG AGGCTGGGTG    360
TGGTGGCTTA CGCCGGTAAT CCCAGCACTT TGGGAGGCCA AGGTGGGTGG ATCACCTGAG    420
GTTGGGAGTT CAAGACCAGC CTGACCAATA TGGTGAACT CCGTCTCTAC TAAAAATACA    480
AAAATTAGCT GGGTATGGTG GCGCACACCT GTAATTCCAG CTCCCGCCGG GCGACTCGAC    540
CAAAGAGGCC GGAATTTGGC CCTCGAAGCC AAGAATTCGG CACGAGGGGT ATTTTATTAT    600
TTANTTNTTC TGTCTCTCTC TNGAGTGAT AGTGTAGAGG GGGTTTCTGT CTTGAGTGTA    660
GGCCTGGAGA TTCCCTTAT ATGGTACAAA CCAGCAATGA ATTAAGAGGT CTCTTTTCTC    720
CAAGATCTAG TGTTTGTAC TAGGAGAACT CTAAGAAAGTA TCTATTTTAC TGTAGTGCCA    780
AAGTACAAAT TTATTGGAT TTATTTTGTG CCATCTTATT TTTTAATATA TTTCTTTTTC    840
TATGTTGTGC TTCTTTCCCA CCTCATCTCT CCTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:868:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:868:

```

GAATTCGGCC TTCATGGCCT AGTCATGGCT TTAGAATCTG GAGAAGAGTC TGACTCACTT    60
CTTTCCTGAG GGGATGCACT GGGTTTCACA TCAAGTTCTT GAGAGGATCC CGAACGACTT    120
CTCTGCCCA GGGGAGTCCG AGCCACAGTT TTCTGATCAA CTGATGATTC TGACCCGCTT    180
CTTCTCTCT GGGGGGTAAG ACCTTGTTG TTGAGCTCTG GGGATGATGG AGAACGACTC    240
CTCGGCCTAG GAGTCTGAGG CAAAGCTTTC GGTCTGTTGG AAGAATCACA TTCGCTTCTC    300
CCTCTAGATG GCGTTCTAGG TATATCTTTC ATTCCAGGAG AGGACCCAGA CAGGCTGTGC    360
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:869:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:869:

GAATTCGGCC	TTCATGCCTA	GAGGATCTTC	TCCTGACCCA	GCATCGCTCA	TCACAATGAA	60
GAACCAAGAC	AAAAAGAACG	GGGCTGCCAA	ACAATCCAAT	CCAAAAAGCA	GCCCAGGACA	120
ACCGGAAGCA	GGACCCGAGG	GAGCCCAGGA	GCGGCCAGC	CAGGCGGCTC	CTGCAGTAGA	180
AGCAGAAGGT	CCCGGCAGCA	GCCAGGCTCC	TCGGAAGCCG	GAGGGGGCTC	AAGCCAGAAC	240
GGCTCAGTCT	GGGGCCCTTC	GTGATGTCTC	TGAGGAGCTG	AGCCGCCAAC	TGGAAGACAT	300
ACTGAGCACA	TACTGTGTGG	ACAATAACCA	GGGGGGCCCC	GGCGAGGATG	GGGCACAGGG	360
TGAGCCGGCT	GAACCCGAAG	ATGCAGAGAA	GTCCCGGACC	TATGTGGCAA	GGAATGGGGA	420
GCCTGAACCA	ACTCCAGTAG	TCAATGGAGA	GAAGGAACCC	TCCAAGGGGG	ATCCAAACAC	480
AGAAGAGATC	CGGCAGAGTG	ACGAGGTCGG	AGACCGAGAA	GCCCTCGAG		529

(2) INFORMATION FOR SEQ ID NO:870:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:870:

GAATTCGGCC	TTCATGGCCT	AATTTGAGCT	TCAAGTCTCC	ATGTGTATAA	TGTGGGGTTG	60
ATGCTGTGGT	GCTCCAAGGT	GTTGGGGGGT	TTTAGGCAGA	GTTCTTATGC	TTAATATAGG	120
ATGGAAAAGT	GTTTCGAGCT	CTTCCCTTTT	CTCTTTCTTC	TCTTCATCTG	ACATGAGCCT	180
GGGGTTCTAC	CTCTTCAGCA	TAATTCATCC	TGGAGCTACT	AATTCTATCT	CCCCATTGAT	240
TTTAGTGTCC	TGTCTGTTTC	TAAATCTACT	GGGCAGTTGG	AGACATTGTC	TTTTGTTCCT	300
TCATCTATCT	TCTGTATCCA	CAGTTGATAA	TTGTCTATGT	TTTAGTGTG	TTTAAAGGAA	360
ACTAGTCTCG	AG					372

(2) INFORMATION FOR SEQ ID NO:871:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:871:

GAATTCGGCC	TTCATGGCCT	AGGTGGTGGG	TGCTGTAGT	CCCAGCTACT	TGGGAGGCTG	60
AGGCAGAAGA	ATTGCTTGAA	CCCGGCAGGC	AGAGGTTGCA	GTGAGCTGAG	ATCGTGCCAC	120
TGCACTCCAG	CCTGGGTGAC	AAGAGTGAGA	CTCTGTCTCA	AAGAAAAGAA	ACAAAAAATT	180
ATGTACACAA	ATATGGACAG	CACTGGCAAG	AAGTGTGGCA	AAAACACATG	TGGTTCTCTT	240
GTTTTGGGCT	CAGACATGTG	GCTGTGCCAT	TACAGACCCC	CGGGATTAG	AATCCTCCTT	300
CTGAAAGGCG	TCCTGTGCAC	TCGTGAGCAC	CAGCCTGAAC	AGATGAAAAG	GCTGAGCTGG	360
AGGGGCTGGG	ACACAGCCCA	CCTTGACGAC	AGCTGCTCCT	GGCTGTGCGG	GGGGGTCTCC	420
AGGAAAGGCC	ATTCTCCAC	TAGGATCGCC	AGGCCCTACT	GAGGCTCAAG	CTCCTTTGCT	480
GTTTGGAATC	TTCCCTCCCC	AGCCCCCAG	CCTCATCAAA	GGCTGCCTTT	TCCTGTTTAC	540
TGACCACAGC	TGCTTTGACT	CCATTAGCCT	CGAG			574

(2) INFORMATION FOR SEQ ID NO:872:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:872:

GAATTCGGCG	TTCATGGCCT	ACCAGACTAC	TACGGACTCA	TCTAACAAAA	CAGCACCGAC	60
TCCAGCATCC	AGTGTACCA	TCATGGCTAC	AGATACAGCC	CAGCAGAGCA	CAGTCCCCAC	120
TTCCAAGGCC	AACGAAATCT	TGGCCTCGGT	CAAGGCGACC	ACCCTTGGTG	TATCCAGTGA	180
CTCACCAGGG	ACTACAACCC	TGGCTCAGCA	AGTCGCAGGC	CCAGTCAACA	CTACCGTGGC	240
TAGAGGAGGC	GGCTCAGGCA	ACCCTACTAC	CACCATCGAG	AGCCCCAAGA	GCACAAAAAG	300
TGCACACACC	ACTACAGTTG	CAACCTCCAC	AGCCACAGCT	AAACCTAACA	CCACAAGCAG	360
CCAGAAATGGA	GCAGAAGATA	CAACAAATTC	TGGGGGGAAA	AGCAGCCACA	GTGTGACCAC	420
AGACCTCACA	TCCACTAAGG	CAGAACATCT	GACGACCCCT	CACCCTACAA	GTCCACTTAG	480
CCCCGACAA	CCCCTTCGA	CGCATCCTGT	GGCCACCCCC	AACTCGAG		528

(2) INFORMATION FOR SEQ ID NO:873:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:873:

GAATTCGGCC	TTCATGGCCT	AAGCTGCACA	AAACGTAGAA	AGAAGACATA	GCGCCTGCCA	60
GGGGAATAGG	AAATGAGGGC	ACTTACACAT	TAATGTGAAT	TAGTAATTGT	GGTATAGAAA	120
TGTTTTATAG	TGAAAGATTG	AAATTGCTT	TTCAAGAAAA	ATGCCAAAAG	CTATTTAAAT	180
AATTCGAGGT	TACATCGTAG	GTTTTGATTT	TTCTCAATTT	AAGATACAGA	AATACAGCAA	240
GCCTTAATAT	AAAGTTTCCT	AAAGTTTCTT	CAAGTATTTT	TTAAGGTGGA	GAAATGCAGG	300
AATTGTATAA	CCAGAATTGT	TTCTGCCTTT	AGCTTTTCAG	AACTTGAGAT	GTGGCAGCAC	360
TGGACTGGGT	TTTTTTAAAT	GTTAGGACTA	GGAATGTTTG	CTCTTGTTAA	TTATGAATTA	420
ATTGATTATT	AAGTTTAGAA	TGCATTTTTA	CAAGTATCTA	ACTATCAAAT	TGTGTTTAGT	480
AACTTGAGTG	TATGCACAAG	TTGATCAAC	AGCAAAATAG	AGTTCTGAAT	TTCTTTTAAA	540
GTGATGATAT	ATTATTTTGT	GAAACTTTGT	GTTTGAAAAT	GTTTATTTCT	GTTTATGGTG	600
TAATACTCGA	G					611

(2) INFORMATION FOR SEQ ID NO:874:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:874:

GAATTCGGCC	TTCATGGCCT	ACGAGCGGTG	AAGGAGGAGA	CCAAGGAGGA	TGCTGAGGAG	60
AAGCAATAAA	TCGTCTTATT	TTATTTTCTT	TTCTCTCTT	TCCTTTCTT	TTTTTAAAAA	120
ATTTTACCCT	GCCCCCTTT	TTGGGTTTGT	TTTTATTCTT	TCATTTTAC	AAGGACGTT	180
ATATAAGAA	CTGAACCTCA	CATTGAGTT	GTTTTTTTTT	TTGTTTCTAA	GTTTTTGCCC	240
TATTGAAGAT	GACTTCAGAA	AATCCATTCC	CCAGTCATGA	AAATGTACTG	TGCTATTCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:875:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:875:

```

GAATTCGGCC TCATGGCCTA ACGGCAGCGG CAGCCTCTGA AAAGAATCGG GGCCCAAGAA      60
AAGGCGGTCTG TGTATCGCT CCCAGGAAGG CGCGCGTCTG GCAGCAGCAA AAGCTCAAGA      120
AGAACCTAGA AGTCGGAATC CGGAAGAAGA TCGAACATGA CGTGGTGATG AAAGCCAGCA      180
GCAGCCTGCC CAAGAAGCTG GCACTGCTGA AGGCCCCAGC CAAGAAGAAA GGGGCAGCTG      240
CCGCCACCTC CTCCAAGACA CCTTCCTGAG GACGTGGGCC CCAGTGCAGG CCAACATCCC      300
ACCCCTACC TCCATATGGG ACCTTGCAAG TCATCCCACT TCCTCGAG      348

```

(2) INFORMATION FOR SEQ ID NO:876:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:876:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGAGAC      60
TATTTTCCAT TTCACACAAG AAATCTTTGA TTATTCAGTA AAAAGAGGAA ATATAAGAAA      120
AAAAATCAGA CTAGTCTGGC CAACATGGTC TAAAAATACA AAATTAGCCA GGCATGGTGG      180
CGGGCGCCTG TAATCCAGC TACTTGGGAG GCCCAAGCAG GAGAATCGCT TGGACTCGGG      240
AGGCGGAGGT TGCAGTGAGC CGAGATCATG CCACTGCACT CCAGCCTGGC AGACAGAGCA      300
AGACTCCCTC TCCAAAAAAG TTAATAAAAA AAAAGAAAAA AAAGGCCGGG TGCAGTGGTT      360
CGGCCTCCCA AAGTGCGGGG ATTACAGGCG TGAGCCACCA TGCCCGGCCA CTTTCTGTAT      420
TTTTTAATAA ATAAGAAATA CACATTTAGT AGTAGTTACA AAGATCTGTA GGCCGTAGCA      480
AATATTCAGT AACTGGAAGA TGCCAATGAA CATTGTTGGG TAGTATTTAA ATAACAAAAT      540
GTTCAAATAT TTGACAAGAT TAACAACACT ACACGGCCTT CTCGAG      586

```

(2) INFORMATION FOR SEQ ID NO:877:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:877:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGTAA      60
TTTTAAAAAT TTATGTATTT TCTAGCATTT GCCTCAAGGA TTGAAATTTT TTTTCTTACT      120
TGTGTTTACA GGTAATATC TTTATTTAAA AAGTCAGTTG AATATCAAAA CTATTTGATA      180
TTCTTCAGAC TGGAATATTA TTCTCTAGTG TAGAAGAAAA CATTTCTGTC TTACAAAACA      240
AATAGTAAAT ACTCTAAAT AGGGGTTGGC AAACCTTTCT TAAATAAAAG GCCAGATGGT      300
AACTATTTTA GGTTTTGTGG GCCATGTGTT GATAACTATT TTAGGTTTTG TGGGCTACGT      360
ATGGGGTCAC TCTCCATT C TCTCTCTC TCTCTCTC TCTCTCTC TCTCTCTT      420

```

TGTGTGTGTG AGCGGCGCTC TCGAG

445

(2) INFORMATION FOR SEQ ID NO:878:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:878:

```

GAATTCGGCC AAAGAGCCGG AATTTGGCCC TCGAAGCCAA GAATTCGGCA CGAGGGGGTC      60
TCCATTCCCC GAGAAGCCAG GGGCAGGGTG GGATGGGGAA GACCAGGAGC AGAGTCGAGC      120
CTCACAGAAG CCAGCGCGGG TCTCTGCTCA GCACCCACAG CGGGGCTCTG GACCCAGGGT      180
AACAGCCCCA GTTCATCCCA ACCCTCTCA GAGCCTCAAG AGGGGTAGCT CGGCTGCCGG      240
AAGAGAGGGG TGCCCTATCC CTGGCAACCC CTCCACGTAG CGTACCCAG CACCTGCCAC      300
CGCCTTTGCC ATTTCTTTGA GCTTGAAGTT AACTCTCTTA GAGTCTAACT TTGGTTTCATT      360
TCTGCACAGG TACAATAGAT GACTTTATTT GTTTAAAATG TTAAATATAT ATACATACAT      420
ATATATATAT TTGTCTGTAA GAATTATGTT TAAACAGCT GCTGTAGAGT ACCTTTTTTT      480
AAGTAAATCT TACAGTGGAG TATATTTTTT AAAGCACAAA ATTGGTGCCA AGACTGGGTG      540
AGAAATGTAC ATTACCCCTT TATTATTTTG CGTCGGATTC CTCGAG                      586

```

(2) INFORMATION FOR SEQ ID NO:879:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:879:

```

GAATTCGGCC AAAGAGCCGG AATTTGGCCC TCGAAGCCAA GAATTCGGCA CGAGGGGAAA      60
ATCTTGTCCT AAAAATATAT GAGTTTGGGG GTAAGGGGTG GGATAGCCAA GCAAAATCAG      120
TAATTATTTT AAAATGAACA TATGAATTTT TATTAACCTT TAGTTAAATA CAGATTTTAC      180
AACGAGGTCA GCATAAGCCT AAATCTATAT AGAGGGCTAA CTCAGGCATT GTCTTGTTTA      240
TTGTAGACT GGATTAAGAA CAACCTGTCC TGTTTTGTC GTTCCAGCT TCTTCGTTTA      300
GAATAAATTA GACCAAAAGA AGAAACGTGC TTGTCTCTGT ATACCCGAG AATGAAGTTA      360
CTGTTGTTAA AACCGGATTT TTTCATTTTA CTAGGTTCCG CTCTCTCCCT CGAG          414

```

(2) INFORMATION FOR SEQ ID NO:880:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:880:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC TCGAAGCCAA GAATTCGGCA CGAGGGTAAT      60
TTTAAAATTT TATGTATTTT CTAGCATTTG CCTCAAGGAT TGAAATTTTT TTTTACTT      120

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GTGTTTACAG GTAGAATTCT TTATTTAAAA AGTCAGTTGA ATATCAAAAC TATTTGATAT      180
TCTTCAGACT GGAATATTAT TCTCTAGTGT AGAAGAAAAC ATTTTCTGCT TACAAAACAA      240
ATAGTAAATA CTCTAAAATA GGGGTTGGCA AACTTTTCTT AAATAAAAGG CCAGATGGTA      300
ACTATTTTAG GTTTTGTGGG CCATGTGTTG ATAACATATT TAGGTTTGT GGGCTACGTA      360
TGGTGTCAAT CTCCTATTCT CTCTCTATCA CCTACCCTCG AG                        402

```

(2) INFORMATION FOR SEQ ID NO:881:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:881:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGGCC      60
GTTTTTTTTT TTTTTTTTTT TTTTTCNNG NNAGGCTTTC CCTAGGTGAT TTTTAATTGC      120
TATTATAAAT AAATATCCAT TTTTCCATA AAATATTGCT ATATGTTAGT ATATTAATCT      180
TGTAATGTTA CCTTTTCAA CTCTATGGT TCTGATAGCT TGTCAGTTGT CTACCTTTCA      240
TCTTCTAGGT AAATATTCTT TACAATAAT GAGATTTGCT CCTACTTTCC AATTTATCTC      300
ATTACTTTTA CTNNTCTTAC TGCACTGGCT AGGACACCAC TACCTTCTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:882:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:882:

```

TTTTTTTTTT TTTTAACTT AAAAATAGTT GTATTATAT TCCACAATT GTTCAAATAC      60
TGGTTTTCTT ATAACTTTC TACAGGATGT TTTTAAACAA ATTCTTCACA TTGTGTTTTG      120
ACTATGTACT TGCGGAATT CAGGGAAATA GTTCTGTGTA TTTTAAATAG CTTAATTGT      180
ACTAAAGGGA TGGTAGGTGG TCACATGCAG TCCATGTGGG ATTCTAACAT GACATTAGT      240
GAGTTTCTG ATGTGGACCA TCCCTTTGAT GCTGAAGGTA ATGCATCTGT TGAAAGAAGT      300
GACTGTAGAT TTGATTACT GCTCTCTGCA TCTCCCTCTT TTCTGCTCGA G              351

```

(2) INFORMATION FOR SEQ ID NO:883:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:883:

```

GAATTCGGCC TTCATGGCAA GAAGGAGNCT TAGCATCAAA CTTTGGAAAG GGAAGCCAGA      60
GAAAAGGTA GAATGGACAA GTGACACTGT GGACAATGAA CACATGGGCC GCCGTTTCATC      120
CAAATGCTGC TGTATTTATG AGAAACTCG GGCCTTTGGC GAGAGCTCCA CGGAAAGTGA      180

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TGAGGAGGAA GAAGAGGGCT GTGGCATACA CACTGTGTAC GTGGCCACCG CAAAGGACGG      240
GTTNTGCAAC CCTAGGACCG ACCCCACCA CCCTCCCCA GCTCCTGACC NTTCCAGCC      300
CCCTCCAGGG CCAATGCAGC ACTAAATCCC TCTCTCCTCC AGCATTCCCTG TGTCTGTCTG      360
GCCCTAAATG TATCCATGTG GCTACTTCTC CAGCCCCCTC CTTCCCTNTC TTCTGCCTGA      420
TAGAGGGAAG AGGAAGAGGA GGACGAACAG AGATCCTGAA ATTCTGACTT GCTGCTATTCT      480
CAGAACCCAG CCTCCTGGGT TTCCCCAGTC CTCATTTTTC CTCCCAATAC CCACCCTTCT      540
CTCTCGAG      548

```

(2) INFORMATION FOR SEQ ID NO:884:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:884:

```

GAATTCGGCC TTCATGGCCT AAAAAATACA AAAAATTAGC CGGGCGTGTT GGC GGCGGCC      60
TGTAAGTCCCA GCTACTTGGG AGGCTGAGGC AGGAGAATGG CATGAACCTG GGAGGCGGAG      120
CTTGCACTGA GCCGAGATCG CGCCACTGCA CTCCAACCTG GGAGACACAG CGAGACTCCG      180
TCTCCNAAAA AAAAAAAAAA AAAAAACAC ACTTGTCTTA CAAAGACTAA CAAAAGATAC      240
AAAAATAAAT AACTTTACAG CATCATTAGA AAGCGAACAA AATCCTAAGA TAGATACATT      300
TATCTTTCTT GTTTTAGAAC TTTTCTGTG TAATGGAATG GAAATGCTTA ATCTTGTTC      360
AATGTTTCA GTGTTTGTG TTTGTCAAAT TGAGGTGGA TGTAAAGCC CTTACTACTG      420
TATTATACAA AGCAGCGAAC CTCGAG      446

```

(2) INFORMATION FOR SEQ ID NO:885:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:885:

```

GAATTCGGCC TTCATGGCCT AGCCGGCGCC GCCGNGTCTT CCCGGTCTCC TTTCCCGGCC      60
GCACAGGGTT TTATAGGATC ACATTGACAA AAGTACCATG GAGTTTTATG AGTCAGCATA      120
TTTTATTGTT CTTATTCCTT CAATAGTTAT TACAGTAATT TTCCTCTTCT TCTGGCTTTT      180
CATGAAAGAA ACATTATATG ATGAAGTTCT TGCAAAACAG AAAAGAGAAC AAAAGCTTAT      240
TCCTACCAAA ACAGATAAAA AGAAAGCAGA AAAGAAAAAG AATAAAAAGA AAGAAATCCA      300
GAATGGAAAC CTCCATGAAT CCGACTCTGA GAGTGACCT CGAG      344

```

(2) INFORMATION FOR SEQ ID NO:886:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:886:

GAATTCGGCC	TTCATGGCCT	AAAAATCTAA	ATTAAGTGAT	GAATAATTTA	AAACAGAATT	60
TCAACATTGA	GACAAATGTAG	AGATATATTA	TGGTATAAAA	TGAAGCATT	GCACGAACTT	120
TTTAGCTAAA	ATTTGTTTCA	AAGAAGTTGC	TTTTGTTTTT	AGTGACCTT	GAGTCAACA	180
CAGATGTGAA	TGCCCGCTT	TTCCAGAAGG	GTTCTTGGGA	GAAAACACTG	GAGAAGTTCT	240
AAGCACTTTT	TTTTTTTTTT	TTTTTTTTTT	TTTTTTTAGA	GATGGTTTCT	TACTCTGTG	300
TTCAGGCTGG	AGTGCACTGT	TGCAATCATA	GCTCACTGCA	GCCTTGACCT	CCTGGCCTCA	360
AGTGATACCC	CTGTCTCAGC	CTCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:887:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:887:

GCCCCAGTCT	AAGGCATTTA	AAATTAAACA	GCTCTTCAAC	GCCCCAAGTT	ATTTCATCAG	60
GCTAAGAACT	TCTCCGAGAA	ACGCACAAGA	AGGCAGGCAA	ACAGGTGGGT	AGGTGAGAGG	120
TCACGGGGCT	CCATCTGCAA	GCTCCATCTA	CAAGGCATCA	ATCTGCGTTG	TGGCATCAAC	180
GTAAATGT	TCTACAGCTT	AGGGATCTTC	TTGAAGCAAG	GTTCCAAGCA	CAAACTAGT	240
ATGACCGGAG	GCTCAATTTA	GAAGATGCAG	CATCTGAAAA	CCTTTACCCC	AGGAAAGGAG	300
GGGTGCCTGC	TGGCATTTCAT	GGGCTCTGGA	ACAAGCATTT	ATTCAAAGCT	GATGGCCCCCT	360
CGAG						364

(2) INFORMATION FOR SEQ ID NO:888:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:888:

GCACCCCAA	ATGCCAGCCT	CTCCTTTCTT	CCCATCCACC	AGTATACTGC	GGGGCCATTT	60
CTGGTCTTTG	TCCAACAGGA	AACCCATTTC	TGGTGGGATA	TGCCTTCCAG	TGCCACAGGG	120
CCACTCACCC	CATGCATCTC	TGTCCTGCCC	GTCACTGCTG	GGACGGACAG	CAAGGGCAAG	180
CCCAGTGTCT	GGCGGATAGG	TGGGTGGGAA	CAGAGAGGGG	AGAATGCCGT	CCTAAGCTTC	240
TGCTTGGGGA	TCCCCACAC	GACCTGGGTA	CTGCCTGGGA	AACCTGTCTC	AAGTAAAACT	300
ATGGACCTCG	CCTCGCCAC	CGGCCTGCGA	AGCCAGCATC	TCCGTGAAGG	TGGATGGAAG	360
CGCCTTTGTG	CTCATTTTGA	GCTGCAAGCT	GGGTCAGCGG	CTCTGAAGCC	CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:889:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:889:

GTAGGCCATG	AAGGCCGAAT	GGAAAAAGTC	AGTTAAAGAG	GACTCAGTCC	CCACAGGTGC	60
GGAGGAGAAT	GTGGTGTGTG	AGTCACCACT	AGAGATTATA	AAGTCCAAGG	AAGTAGAATC	120
AGCCTTACAA	ACAGTGGACC	TCAACGAAGG	AGATGCTGCA	CCTGAACCCA	CAGAAGCGAA	180
ACTCAAAAGA	GAAGAAAGCA	AACCAAGAAC	CTCTCTGATG	GCGTTTCTCA	GACAAATGAC	240
ATCAGACTCC	ACAGAAAAGA	CTATCACACC	GCCAGAGCCT	GAACCAACAG	GAGCACCACA	300
GAAGGGTAAA	GAGGGCTCCT	CGAAGGACAA	GAAGTCAGCA	GCTCTCGAG		349

(2) INFORMATION FOR SEQ ID NO:890:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 719 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:890:

GAATTCGGCC	TTCATGGCCT	AGACCTGCCT	CGAGGATGCT	CTGGGTTTGC	TGTAGTCGTC	60
TGTTACTGGT	CNTGTTAGGA	GGAGGGCCAG	GGGGACCCCC	ACCTGGGGCA	GTCCCTTCTG	120
TCCCTTCAGC	AGGTGGCTGA	GCTGGAGCAG	ACATTTTTCT	GACAGAGAGA	GTGAGGGTCT	180
GTTCCTCTCC	GGAGGCTGCG	GCGAGACACC	CGGCGAGGGA	CGCTGCGGCT	GAAGTGGACG	240
GAAGTGGCAA	GCTCCGCCTC	GCGCCGACTA	CCCCGCGGTC	TAGCTGCGCT	GGGGTTTCAC	300
CATGTTGGCC	AGGATGGTCT	CGATCTCTTG	ACCTTGTGAT	CTGCCTGCCT	CGGCCTCCCA	360
AAGTGCTGGA	ATTACAGGTA	TGAGCCACTG	TGCCTGACAC	CTGTCAAATT	ATTTTACTGT	420
GTTTATTTAC	CATGTTTCTT	TCACTGTGGG	GTCTCTGTCC	TTGCTGTTTT	GTITTTCTTT	480
TAACTTCTTT	TGTTATTTAG	GAAGGTTTAT	ATTAATATTT	TAATTCTACA	TTGGATAATT	540
CCTATATCAA	AACTATTGTT	GACAATCAGT	TACAGATGGA	ACTTCGTCTA	CTCTTTCTCC	600
CCTTCTCACT	CCTGCTCTTT	CTCCCTTTCT	CACTCCAGCA	GTTGACTAGT	CTCATTGAAA	660
AAACAAATTG	GGGCCGGCCA	GGCATGATGG	CTCATGCCTG	TAATCCAGAG	CAACTCGAG	719

(2) INFORMATION FOR SEQ ID NO:891:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:891:

GAATTCGGCC	TTCATGGCCT	AGATACTCCG	CTGAAGATCT	GATGTCACCC	CAAATGCATG	60
GCTCCAGCCT	CAGTTCAGCT	TTCCACACTG	CTTGCAAGAA	TTCTTTCATT	TATCTTGAGT	120
TTCTCCTCTC	ACTCCCATGG	TAGCTTTTCC	ATTCCCACTG	CCTCTTCTCA	CATTTCAGTA	180
GATGAGAATA	GAAGCCATAG	GAAGCAAAC	TCCTCAACCT	CCAGCCAACC	GCCGAGCGAT	240
GGGCATCTCT	CGGGACAAC	GGCACAAGCG	CCGCAAAACC	GGGGGCAAGA	GAAAGCCCTA	300
CCACAAGAAG	CGGAAGTATG	AGTTGGGGCG	CCCAGCTGCC	AACACCAAGA	TTGGCCCCCG	360
CCGCATCCAC	ACAGTCCGTG	TGCGGGGAGG	TAACAAGAAA	TACCGTGCCC	TGAGGTTGGA	420
CGTGGGAAT	TTCTCCTGGG	GCTCAGACTC	GAG			453

(2) INFORMATION FOR SEQ ID NO:892:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:892:

GAATTCGGCC	TTCATGGCCT	ACCAGCCTCT	GGGCTGAGGC	AAAGACCTCT	GAGGCCCCGT	60
CCACCCAGGA	CCCCTCCACC	CAGGCCTCCA	CTGCGTCCTC	CCCAGCCCCA	GAGGAGAATG	120
CTCCGTCTGA	AGGCCAGCGT	GTGTGGGGTC	AGGGACAGAG	CCCCAGGCCA	GAGAACTCTC	180
TGGAGCGGGA	GGAGATGGGT	CCCGTGCCAG	CGCACACGGA	TGCCTTCCAG	GACTGGGGGC	240
CTGGCAGCAT	GGCCACGTC	TCTGTGGTCC	CTGTCTCCTC	AGAAGGGACC	CCCAGCAGGG	300
AGCCAGTGGC	TTCAGGCAGC	TGGACCCCTA	AGGCTGAGGA	ACCCCTCGAG		350

(2) INFORMATION FOR SEQ ID NO:893:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:893:

AACAGGAGAT	GGACAAGCTG	AAGGAGCAAT	ATGATGCTGA	GTTGCAGGCC	CTGAGGGAGA	60
GTGTGGAAGA	AGCAACCAAG	AATGTCGAGG	TCTTGCGGAG	CAGGAGCAAC	ACTTCAGAGC	120
AAGACCAGGC	GGGGACTGAA	ATGCGCGTGA	AGCTTCTGCA	GGAGGAGAAT	GAGAAGCTGC	180
AGGGAAGAAG	CGAAGAGCTG	GAGCGGAGAG	TTGCTCAGCT	TCAAAGGCAG	ATCGAGGACC	240
TGAAAGGCCA	TGAAGCCAAG	GCGAAGGAAA	CGCTGAAGAA	GTACGAGGGA	GAAATACGAC	300
AGTTAGAGGA	GGCCCTTGTC	CACGCCAGAA	AGGAAGAAAA	AGAAGCTGTG	TCAGCCAGAA	360
GGGCCCTGGA	GAATGAACTG	GAGGCTGCTC	AGGGAAATCT	GAGTCAGACT	ACCCAGGAGC	420
AGAAGCAGTT	GTCTGAGAAG	CTCAAAGAGG	AGAGTGAGGC	GCTCGAG		467

(2) INFORMATION FOR SEQ ID NO:894:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:894:

GAATTCGGGC	TTCATGGCCT	ACTCAGCTTT	CCTGGTCTCC	CATCTGAATC	GCTTCTTTGT	60
GCACCTCTTG	TTCTTTCTCT	TGGCTCCCAG	TCTTGATTCC	TGTGATCACT	CTTGCATCAC	120
TAATTGCACA	AGTGATTTC	GGTGCAATTC	TGATTAGCCT	GCGTCCACAC	AGTGATCGAT	180
GATCCTATGT	GCCTAGAAAG	GACACTGTGT	GCTGCTCATG	ACCTGCAACA	GGAAAAAAGC	240
CATTCTTGT	TAGCAGTGTA	AGAACCTTAG	AGCAAAGGAG	TTGACCTTCT	GATTGAATAT	300
AAGCACAACC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:895:

```

GGGCTTAGTT AGGAGCTATG GCTAAACATC ATCCTGATTT GATCTTTTGC CGCAAGCAGG      60
CTGGTGTGTC CATCGGAAGA CTGTGTGAAA AATGTGATGG CAAGTGTGTG ATTTGTGACT      120
CCTATGTGCG TCCCTGCACT CTGGTGCGCA TATGTGATGA GTGTAACATG GGATCTTACC      180
AGGGGCGCTG TGTGATCTGT GGAGGACCTG GGGTCTCTGA TGCCTATTAT TGTAAGGAGT      240
GCACCATCCA GGAGAAGGAC AGAGATGGCT GCCCAAAGAT TGTCATCTG GAGGAACCTG      300
AG                                                                                   302

```

(2) INFORMATION FOR SEQ ID NO:896:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:896:

```

GAATTCGGCC TTCATGGNCT ANTCTCATTT NAAATATATC CTTACTGAAA CATCTGGAAT      60
AACGTCTGAC CAAATATCTG GGTACAGTGA TCCAGCCAAG TTGAGACATG AAATTAATCA      120
CCATGGCCTA CATTTTATAT TGTTTGGCTG CAATTCTGTC AAAGGCTTCT GCTCTTCATA      180
ACATTTCACT CACTAGCTCC ATGAAGCCAT ATGATACAAA CCTTGCCCTGT GTAGCCTTCA      240
CTTTTTCCTA AAAGAAGTCT ATTAAATGCC AATCAAGTAT CTTCTCCTCC AAGCTCAGTA      300
GCTCGGGCCT TCAACAGCTG TTCCCATTC CGATCCATCT CCCTGAGCTA CCCTGGCATT      360
CTTATCAGGA CACTGGAGGA ATCTATGTAT GTGCCTCTAA AGATTCAGCA CCCAAACATG      420
ATAGAAATCA CTGTGTTTAC ACTGTATCTC TATATCTGCC CATCCCGCTC GAG                   473

```

(2) INFORMATION FOR SEQ ID NO:897:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 594 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:897:

```

GCTCGAGTGA AGTGGTATCT CATGTGGTT TGGGTTTAA TTTTATAATA TTTTAATTTT      60
TAAATCAAAA AGAATATACT GGGGCTGGGG TGGTGGCTCA AGCCTGTAAT CCCAGCACCC      120
TGGGGGGCCA AAGGGGGTGG ACCACCTGAG TTTATGAGTT CAAGACCAGC CTGGCCAACA      180
CGGTGAAACC CCATCTCCAC TAAACATACA AAATCAGCC GGGTATGGTG GCAGGCACCC      240
GTAATCCCAG CCTCTCAGGA GGCTGAAACA GGAGAATCAC CTGATCCGGG AGGTGGAGGC      300
TGCCATGAGT CAGAATCACG TCACTGCACT CCAGCCTGAG AGGAGACCCG TACAAAAAAA      360
AAAAAAAAAA ATATATATAT ATACACACAC ACACACACAC ACAAGGATTT TAGATTGAA      420
AATGATGTTT TTTACTCATT TCAAAATGTA CTGTAACCTT TCTTTGGTTC TTAAGTTT      480
CATTTAACTT TCTCTGTTTT CAAGAAAAAT TGTCTTTATT GACATTTGTA AAAAAGAATG      540
TGTTTTGCCC AGTTATTAAG TATTTTATTT TTATGCAATT TCAGAACACT CGAG                   594

```

(2) INFORMATION FOR SEQ ID NO:898:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:898:

GAATTCGGCC	TTTCATGGCCT	ACTGTACATT	TTTTTTAAAG	TTTGTGAAA	AGAATATTGT	60
CTTATTCTAT	AAAACATTTC	AAACCTAGTT	AGAGATTGT	AATCAAAAA	CATTTCGCA	120
GAAAGCAGCA	CTTAGGGCTG	CCTGTTCTAT	ACCCTACAGT	CAGACAGGAA	AAGAACTGAA	180
AATGGCACCC	TTCTGACATT	CTGAGGCAGC	TGGACTGGCA	GCCAAGTAAA	GGAGAGTGAT	240
GAGGTGGTGT	GGGGAGGGTG	GGGAGGCAGC	GCGAGGGTGC	TCTCCACAGG	GTAGGTCTCG	300
AG						302

(2) INFORMATION FOR SEQ ID NO:899:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 475 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:899:

GCGGCCTTCA	TGGCCTAGTG	CTTGTCAGTT	TGGAAAGTCA	CAGGGAGTTT	ACCATTCTAT	60
AATTAGAGTA	GGAGGAAAAT	GAGAACCCAC	TGGTAGAAGA	AGAAGCAACA	GTCTTCTAGG	120
GTCTGGCATT	TGATGAGATA	GGTATTAGT	TACTGTGCAT	TTCCATTGTT	TTTCCATGGC	180
AGAACATACG	GCAGAGATTT	GGGAACCTCG	ATGCCTGAAG	CCAGGTTATT	CTTATGTTCT	240
GTAACATATG	TGCTCGCAGG	GCTGTTGTTG	TCAGAGTAGT	GAGTTGTGCC	CCAGACAAAT	300
GGGGTGCTGG	TCTGCTCCCA	CAAATCTTTA	TCCCAGTCTT	CATCGCAAGG	AGGGCACTGC	360
CAAGTGCTCT	CAGCCAGAGT	CTCTGTCTA	AGGCTCCTGG	TTTGGTTGAC	AACATCTTGC	420
TCAATACAAC	TTCTGTATC	ACAGCTTGAG	ATATGATGAC	TAATTCAGC	TCGAG	475

(2) INFORMATION FOR SEQ ID NO:900:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 507 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:900:

GAATTCGGCC	TTTCATGGCCT	ACAGCTGCCT	TTTTCTTTAA	AGGGGTTCTT	GTCTTCTGGA	60
ATTCCTTTTA	CTAGAGGATC	CTCTCCAGAA	CGTTCTTCAA	TATAGTTCTT	TATTTCTTCA	120
GAACATTTAG	ACACTTGTTG	TCTCTGCAAC	TTCACTTCTT	TGCGAAGCTG	CTCAACTTCC	180
ATTTTCAGTT	TTTCCTTCTC	TGGCAAATCT	TCGATGTGAA	GGGCAGGCAT	TTTCGCCCCA	240
GAACCGGGCT	CAGGCTAGCT	CTGGCAGCGG	AGCCGCTGGA	AGAGCGGCGA	AGCTCGGCGC	300
GTCCCGAAAC	AACTGAAGGC	CTGGCCCGCC	GCCCACCCGC	GCAGGATGTG	ACTGCAGCCC	360
TGCTGCGGTC	CCCAGCTCCC	CGAGGGCTTG	GCTTTCTCCG	GGAGGCTTGT	CACGCCAGCG	420
TGCCCCAGCT	TCCTAGGACC	TGAGAACTCT	GCCTTTTCTC	AAGTCCCTGC	AACCCAGGAG	480
GCCTGCCCCG	GTGCTAGTAG	GCCATGA				507

(2) INFORMATION FOR SEQ ID NO:901:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:901:

```

GAATTCGGCC TTCATGGCCT AGTTTGGATT TTCATATTAG GGATACTCAA CTGGTATTAT      60
TATTCTGGCC CCTGCAAATT TTTCAGTAGG TCCCCTAGTA TGTCATGCCA GGGACTATGN      120
GAGTTCCTGG GAATAGCACT GTAANACATT CTTGAGTGGG TCCTTGACTC CATTGAGTTT      180
ATAATCTCGT AGGAGGAAGG CTATGAAGAA TTCTAATAAA GCAAAGCAAG CAATCACAAC      240
AAACCTTCCT CTTTAACTTA TCAAAAATGG AAACCTTGAA GAGCTGCTCT TTAATAAATC      300
ATTGGAAGC ACCAGGACCC AGGTGTTTGG ACTCAGCCTC ATTTCAGACT GAGATCTGAG      360
GCCATGATAA CTCATGTGCC TATATATGCT GATAATCACC ATTACCTATA CCATTCTTTA      420
CATTCTCTCA TCTACACAAT CATCTTCAAC TCTCTCTCAT CCACTTCAGC GATTGAATTC      480
TTTACCGGCC TCGAG                                     495

```

(2) INFORMATION FOR SEQ ID NO:902:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:902:

```

GAATTCGGCC AAAGAGGCCT AGAATTCCAG ACCTAGCTCA ACCCATGCCT CCTTTCCTTC      60
CTTCCCTCCT TCCTTTCTTT CTTTTCCTT TTCTCCTTCC CTCCCTTCTC CTTTCTTCC      120
TTCTCTCCCT CTTTCTCTTT CTCCCTTCTT CCTGCTCTTC CTCCCTTCTC CCCTCCCTCC      180
CCTCCCTTCT TTCCTTTCCT CCCTCCCTTC CATTCTTTC TCCCCCACC CCCGTTTCTT      240
CTCTTTGGAG AGATGTACAG CTCGAG                                     266

```

(2) INFORMATION FOR SEQ ID NO:903:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:903:

```

GAATTCGGCC AAAGAGGCCT AAATGAGAGC TGAGTGAAGT GGATGCCCT TATAAAAACA      60
TCAGATCTCG TGAGAACTTA CTATCACTAG AATAGCATGG GGGAAACCACC CCATGATTCA      120
GTTACCTGCC CCCAGGTCTC TGCCACCACA CATGGGGATT ATGGGAACCTA CAACTCAAGA      180
TGAGATTGGG GTGGGGACAC AGGCAAATTA TATCAGCTGT TGTGCTCATT AGTTTGATA      240
TCATCCTTGG CTCCTTAGC ACTATAAGGG CAGGATTGAG TCCTTGCAAC AGAAACCATT      300
CAGCCTGCAA AGCTGAACCT ATTTACTTTC TGACCCTTTA TGGAAAAGTT TACTGATCTC      360
TGGACTAGAC AGTTTTTTAA AAATGACATC TTATGACCGG GATTCTCGAG      410

```

(2) INFORMATION FOR SEQ ID NO:904:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:904:

```

GAATTCGGCC AAAGAGGCCT AGCCGAGACT CTGTCTCAAA AAAAAGAAAA AAAGCTGCTT      60
TGGGTCTTAT GAGGGAGGGG ACTGGAATC TAGGTGTTTC AAGCGCCCCA GCGGATTCTT      120
AAGGTCACAC AAGCTTGGGA GACACTTCAT TAAGCAAAAT CTTTGGCCG TTTTGTCTG      180
GTTGAGCCTC AGTGTCTATT CATTGAGTGG TCACCAAGAG TTTGGGGTGG ACTGATCATC      240
AGCATTTACA GGTTTGGAAA TTGAATTAG TTTTACTACT CAGAGCTTAT TAGACTTGAG      300
CAGATTTAAA CGGAAGGACA CTCGAG                                     326

```

(2) INFORMATION FOR SEQ ID NO:905:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:905:

```

GAATTCGGCC AAAGAGGCCT AGGAACTGTT TTGACCCTGA AGGCTATTTA ATCCACTGTC      60
CCCTACAAGG CCTACAAGT GCTGGGGGAA AAAAAACAGC AATGAGGATG ATCCTGAGTT      120
AATGTGTATG CTCGCAAGA GAGCTTGCCT ATACCTTGAT TATTTCAATA AATCACATGT      180
TAATACATG CTTTCAGAAAT GAAATACTGA CTTGATCTGA TAGGAGAAAA TGGTAATATT      240
TCATAGTTGT TTTCCAAAGA CAAATTTAAA TGTGTCTGT TATCTCCTTA CTTAGTTTAA      300
GAATTTAGTT TTGAACCCCA TTGACTTTGT CATTGCAAT TTTAAAAATA TTTGGGACTG      360
GGCATGGTCG CTCACGCCTG TAATCCAGC ACTTTGGGAG GCATCTCGAG                                     410

```

(2) INFORMATION FOR SEQ ID NO:906:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 498 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:906:

```

GAATTCGGCC AAAGAGGCCT ACGCTTCCCG GGTTCAGCG ATTCTCCTGC CTCAGCCTTT      60
TGAGTGGCTG GGAATACAGG TGGATGCCTC CATGCCTGGC TAATTTTGTG TATTTTAGTG      120
GAGACAGGGT TTCACCGTGT TGCCCGGGCT GGTCTTGAAC TCGTGAGCTC GGGCAATCCA      180
CACTCCTTGG CCTCCCAAAG TGCTAGGATT ACAGGTGTGA GCCACTGCAC CCGGTGAGG      240
TACAGTTTTG AAGTTCATGC AAATCTCATC ATTTGCTCTT CTGCAACAAA ACATTTTCTT      300
TCAACTTATT TTGCCTGTGT GAAGCTCAGT GCTTTAACTC ATATATGGAG TTATCTTCTT      360
CCCTCAGACT GGAGACGTTG GTGAAATTGG GGCTAGACTG AAGATGTCTA AGGTGGCTTG      420
ATTGACAAAG GTCTCTCCTC ATCCCCAAAA TAAATAACAT TTTTTCATTT ATAATAGTAA      480
TACACCAGTC GACTCGAG                                     498

```


(2) INFORMATION FOR SEQ ID NO:907:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:907:

```

GAATTCGGCC AAAGAGGCCT AAAGGCTGC TGGTTTCACA TCACGACAGC AACGGGATTG      60
TTTGTCTTTG AAAATGTTGC AGTCCACCTG TCCAAGTGA TCTTCCGGAC ATTTGACTTG      120
TTTCTGGTTA TCCACCATCT CTTTGCCTTT CTGGGGTTTC TTGGCTGCTT GGTCAATCTC      180
CAAGCTGGCC ACTATCTAGC TATGACCAGC TTGCTCCTGG AGATGAGCAC GCCCTTTACC      240
TGCGTTTCCT GGATGCTCTT AAAGGCGGGC TGGTCCGAGT CTCTGTTTGT GAAGCTCAAC      300
CAGTGGCTGA TGATTCACAT GTTTCACCTG CGCATGGTTC TAACCTACCA CATGTGGTGG      360
GTGTGTTTCT GGCACTGGGA CGGCCTGGTC AGCAGCCTGT ATCTGCCTCA TTTGACACTG      420
TTCCTGTGCG GACTGGCTCT GCTTACGCTA ATCATTAAAT CATATTGGAC CCAGACTCGA      480
G                                                                                   481

```

(2) INFORMATION FOR SEQ ID NO:908:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 764 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:908:

```

GAATTCGGCC AAAGAGGCCT AGAAACAATG GTTTTCAGAC ACTGAAAGTT CATAGTACAG      60
GACTGTGATC TCTGCGAGAA GGGGGAATAA TGAGGTGAGT CCAGTGATTG CTCAGGCGAA      120
TGGCCTGGAG GCAGTTTCTA GGCAGCAAAG CAGGGAGAGG GAAGCCAGAG ACCAGTGGTC      180
CTGCTGTGTT GAGGAGATGG AGATCAGTGT CACCGGAGGC CAAGGTGAGT AAGTGAGAGG      240
AGAGGAGGCA GCAGCACACA GACAGAGAGT GCTGTAGATC TGCAGTGGGT CCCCTGGAGT      300
CCTTGGTTGA GTGAAGGTGT TAGAAGAAAC TACTTAAGCC AAGAAATGAG TAACTGGAAA      360
TTAGTAGAGC AAATAATTTA CAGATCATCT ATGGGGCTGG GAAAAGTTTG TGTTCCTACT      420
AGCCAGAGTA GAAATAACTC ATAATGCATG GGTATCAGG TGGAGTCCTC CAACAGGTGT      480
TGCCTTAGTA CTGAGGTCAA ATTGTCCCTA GACCAAAGGC TTCTTTGGAC TTCCCCTAAC      540
AAAGCTTAAA GACAAGCCTT GGAAGGATCA AACTAATTTT AAGAACTTA ACTGTGAATC      600
AGAATAAAAC CCAATACCAT TTATAGGAAT ATAACAAAT CCATCAACAN ACNACATAAC      660
ACTCATAATT ACCAACATTC AGTAAAAAAT TACTGGAAAC AGAGAAATAT AAATTATGGC      720
CCATAATTAG GAAAAAAGGG TAATCATTAG AGGTAGAAT CGAG                                     764

```

(2) INFORMATION FOR SEQ ID NO:909:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:909:

```

GAATTCGGCC AAAGAGGCCT ACTAAGGACT TGTTCGGAA GGAGCTGACT GGCCAATCAC      60
AATTGCGAAG ATGAAGGCTC TGTGGGCCGT GCTGTTGGTC ACATTGCTGA CAGGATGCCT      120
AGCCGAGGGA GAGCCGAGG TGACAGATCA GCTCGAG                                157

```

(2) INFORMATION FOR SEQ ID NO:910:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:910:

```

GAATTCGCGG CCGCGTCGAC AGAATAGACC TGGTTTGTGA ATTATGGCCT GGATTTCACT      60
TATACTCTCT CTCCTGGCTC TCAGCTCAGG GGCCATTTCC CAGGCTGTTG TGA CT CAGGA      120
ATCTGCACTC ACCACATCAC CTGGTGAAAC AGTCACACTC ACTTGTGCT CAAGTACTGG      180
GGCTGTTACA ACTAGTAACT ATGCCAACTG GGTCCAAGAA AAACCAGATC ATTTATTAC      240
TGGTCTAATA GGTGGTACCA ACAACCGAGC TCCAGGTGTT CCTGCCAGAT TCTCAGGCTC      300
CCTGATTGGA GACAAGGCTG CCCTCACCAT CACAGGGGCA CAGACTGAGG ATGAGGCAAT      360
ATATTTCTGT GCTCTATGGT ACAGCAACCA TTGGGTGTTT GGTGGAGGAA CCAAACTGAC      420
TGTCTAGGC CAGCCCAAGT CTTGCCATC AGTCACCCTG TTTCCACCTT CCTCTGAAGA      480
GCTCGAG                                487

```

(2) INFORMATION FOR SEQ ID NO:911:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:911:

```

GAATTCGCGG CCGCGTCGAC AGT TACTGAG CACACAGGAC CTCACAATGG GATGGAGCTA      60
TATCATCCTC TTTTGGTAG CAACAGCTAC AGGTGTCCAC TCCCAGGTCC AACTGCAGCA      120
GCCTGGGGCT GAGCTGGTAA AGCCTGGGGC TTCAGTGAAG TTGTCCTGCA AGGCTTCTGG      180
CTACACTTTC ACCAGCTACT GGATGCACTG GGTGAAGCAG AGGCCTGGAC AAGGCCTTGA      240
GTGGATTGGA ATGATTCATC CTAATAGTGG TAGTACTAAC TACAATGAGA AGTTCAAGAG      300
CAAGGCCACA CTGACTGTAG ACAATCCTC CAGCACAGCC TACATGCAAC TCAGCAGCCT      360
GACATCTGAG GACTCTGCGG TCTATTACTG TGCAAGGGAC AGCTCAGGCT ACGACTATGC      420
TATGGACTAC TGGGGTCAAG GAACCTCAGT CACCGTCTCC TCAGCAGGAA CGCTCGAG      478

```

(2) INFORMATION FOR SEQ ID NO:912:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:912:

GAATTCGCGG	CCGCGTCGAC	CCAGGATGCC	GCGCAGCAGA	GCTCTGATTC	TGGGGGTCCT	60
CGCCCTGACC	ACCATGCTCA	GCCTCTGTGG	AGGTGAAGAC	GACATTGAGG	CCGACCACGT	120
AGGCACCTAT	GGTATAAGTG	TATATCAGTC	TCCTGGGAGAC	ATTGGCCAGT	ACACATTGTA	180
ATTTGATGGT	GATGAGTTGT	TCTATGTGGA	CTTGATAAG	AAGGAGACTG	TCTGGATGCT	240
TCCTGAGTTT	GGCCAATTGG	CAAGCTTTGA	CCCCCAAGGT	GGACTGCAAA	ACATAGCTGT	300
AGTAAACAC	AACTTGGGAG	TCTTGACTAA	GAGGTCAAAT	TCCACCCAG	CTACCAATGA	360
GGCTCCTCAA	GCGACTGTGT	TCCCAAGTC	CCCTGTGCTG	CTGGGTCAGC	CCAACACCCT	420
CATCATGCTC	GAG					433

(2) INFORMATION FOR SEQ ID NO:913:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:913:

GAATTCGCGG	CCGCGTCGAC	GCAAGATGGA	TTACAGGCC	CAGGTTCTTA	TATTGCTGCT	60
GCTATGGGTA	TCTGGTACCT	GTGGGGACAT	TGTGATGTCA	CAGTCTCCAT	CCTCCTGGC	120
TGTGTCAGCA	GGAGAGAAG					139

(2) INFORMATION FOR SEQ ID NO:914:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:914:

GAATTCGCGG	CCGCGTCGAC	ATCATGGCTA	CCCTGCGTGT	CCCCTCCTG	GTGGCTCTCG	60
TCCTTCTTGC	TGTGGCAATT	CAGACCTCTG	ATGCAGGTCC	CTATGGTGCC	AATGTGGAAG	120
ACAGTATCTG	CTGCCAGGAC	TACATCCGTC	ACCCTCTGCC	ATCAGC		166

(2) INFORMATION FOR SEQ ID NO:915:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 590 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:915:

GAATTCGCGG	CCGCGTCGAC	TTCTTGGGCA	GCACAGAAGA	CAGAGCCGAT	TTTGACCAAG	60
CTATGTTCCC	TGTGATGGAG	ACCTTCGAAA	TCAATGATCC	AGTGCCCAAG	AAGAGAAATG	120
GGGGGACCTT	CTGCATGGCA	GTCAATGGCA	TCCACCTGAT	CCTGCTCAGC	GCAGGTAATG	180
CACTGCTGCT	GATTCAAGTT	CTCAATCTGC	AGGAGCAGCT	CCAGATGCTA	GAGATGTGCT	240
GTGGCAATGG	ATCACTAGCT	ATCGAGGACA	AGCCCTTCTT	CTCGCTGCAG	TGGGCACCCA	300
AAACACACCT	GGTACCTAGA	GCACAGGGGC	TGCAAGCCTT	GCAGGCCAG	CTCAGCTGGG	360

```

TCCATACCAG CCAGGAGCAA CTCCGTCAGC AGTTCAACAA CCTCACTCAA AATCCAGAGT    420
TGTTCCAGAT TAAAGGTGAA CGAGGCTCTC CAGGTCCAAA AGGGGCCCCG GGTGCTCCTG    480
GAATCCCCGG GCTGCCTGGG CCAGCTGCTG AGAAGGGAGA AAAGGGGGCT GCAGGTCGTG    540
ATGGAACCCC AGGTGTCCAA GGACCCAGG GCCCACCAGG AAAACTCGAG    590

```

(2) INFORMATION FOR SEQ ID NO:916:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:916:

```

GAATTCGCGG CCGCGTCGAC GGAAGAGCAA TGAAAACATA TGCTCCTACA TTATTCATGT    60
TTCTATGGCT GCAGCTGGAT GGGATGAGCC AAGGTGAGCA GGTGGAGCAG CTTCCCTTCCA    120
TCCTGAGAGT CCAGGAGGGA TCCNGTGCCA GCATCAACTG CACTTATGAG AACAGTGCCT    180
CCAACTACTT CCCTTGGTAT AAGCAAGAAC CTGGAGAGAA TCCTAAGCTC ATCATTGACA    240
TTCGTTCAA TATGGAAAGA AAGCAGACCC AAGGACTCAT CGTTTACTG GATAAGAAAG    300
CCAAACGTTT TCCCTGCACA TCACAGACAC CCAGCCTGGA GACTCAGCCA TGTACTTCTG    360
TGCTGCAAGT GAGAGCACCA ATACAGGCAA ATTAACCTTT GGGGATGGGA CCGTGCTCAC    420
AGTGAAGCCA AACATCCAGA ACCCAGAACC TGCTGTGTAC CAGTTAAAAG ATCCTCGGTC    480
TCAGGACAGC ACCCTCTGCC GTTTCACCGA CTTTGACTCC CAAATCAATG TGCCGAAAAC    540
CATGGAATCT GGAACGTTCA TCACTGACAA AACTGTGCTG GACAATCTCG AG    592

```

(2) INFORMATION FOR SEQ ID NO:917:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:917:

```

GAATTCGCGG CCGCGTCGAC GAATGAGGTG CTCTCTTCAG TTCCTGGGGG TGCTTATGTT    60
CTGGATCTCT GGAGTCAGTG GGGATATTGT GATAACCCAG GATGAACTCT CCAATCCTGT    120
CACTTCTGGA GAATCAGTTT CCATCTCCTG CAGGTCTAGT AAGAGC    166

```

(2) INFORMATION FOR SEQ ID NO:918:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:918:

```

GAATTCGCGG CCGCGTCGAC GTCTGAGAGG AACCCCTTCTC TGAGGATGGA CACTTCTCAC    60
ACTACAAAGT CCTGTTTGCT GATTCTTCTT GTGGCCCTAC TGTGTGCAGA AAGAGCTCAG    120
GGACTGGAGT GTTACCAAGT CTATGGAGTC CCATTGAGA CTTCTTGCCC ATCAATTACC    180

```

TGCCCCCTACC CTATAGTGAG

200

(2) INFORMATION FOR SEQ ID NO:919:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:919:

GAATTCGCGG CCGCGTCGAC CCAACCTTCC GGAAGCCTCC CCATCAGCAC CATGAACCCA	60
AGTGCTGCCG TCATTTTCTG CCTCATCCTG CTGGGTCTGA GTGGGACTCA AGGGATCCCT	120
CTCGCAAGGA CGGTCCGCTG CAACTGCATC CATATCGATG ACGGGCCAGT GAGAATGAGG	180
GCCATAGGGA AGCTTGAAAT CATCCCTGCG AGCCTATCCT GCCCACGTGT T	231

(2) INFORMATION FOR SEQ ID NO:920:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:920:

GAATTCGCGG CCGCGTCGAC GTTTTGTAT TGTTACGAAG TAAATGATTC GTATGCTGTA	60
CATAGCTGTT ATAGAAGTGG CGATTAGTGT AATTAGTAGG GCTCAGGCTC TCGAG	115

(2) INFORMATION FOR SEQ ID NO:921:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:921:

GTTGAATTCT AGAAATCAAA ATTAATTGA CAAAGGAAAA GCAGATGCCG GAAACTTCTT	60
CCCAGTCTGT CATACAATTC ACCACTGGCC AGGTGCTGAG AGAAGCATTG GGAACAGTG	120
TGGGTGTGT CAGAGTTGGA CGGCTCCATC CCTTTGGCTT CATTATCTTC CTCCTCATGG	180
AGATTCTAAA GCAACCCGTC GACGCGGCCG CGA	213

(2) INFORMATION FOR SEQ ID NO:922:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:922:

GAATTCGGCC	AAGAGGCCTA	CTTAGAAGCC	AAAGAAGGAG	ATTTGCACAG	GATAGAAATC	60
CCATTCAAAT	TCCACATGCT	GCATTCAGGG	CTGGTCCACG	GCCTGGCTTT	CTGGTTTGAC	120
GTTGCTTTCA	TCGGCTCCAT	AATGACCGTG	TGGCTGTCCA	CAGCCCCGAC	AGAGCCCTCG	180
ACCCACTGGT	ACCAGGTGCG	GTGCCTGTTC	CAGTCACCAC	TGTTCCGCCAA	GGCAGGGGAC	240
ACGCTCTCAG	GGACATGTCT	GCTTATTGCC	AACAAAAGAC	AGAGCTACGA	CATCAGTATT	300
GTGGCCCAGG	TGGACCAGAC	CGGCTCCAAG	TCCAGTAACC	TCCTGGATCT	GAAAAACCCC	360
TTCTTTAGAT	ACACGGGCAC	AACGCCCTCA	CCCCCACCCG	GCTCCCACTA	CACATCTCCC	420
TCGGAAAACA	TGTGGAACAC	GGGCAGCACC	TACAACCTCA	GCAGCGGGAT	GGCCGTGGCA	480
GGGATGCCGA	CCACCAGACT	CGAG				504

(2) INFORMATION FOR SEQ ID NO:923:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:923:

GAATTCGGCC	AAAGAGGCCT	ACATTCATCA	AGTCATCCAA	CTTCTATAGT	CAAAGCAGGA	60
TCATGTGGCG	AAGCATATGC	TCCACAAGGG	TGGATAGCTT	TTTTCATGGA	ATTCTCGAG	119

(2) INFORMATION FOR SEQ ID NO:924:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 706 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:924:

GAATTCGGCC	AAAGAGGCCT	AAAGAGAGTG	GAGGAGGAGG	ACAAGATTGA	TACTATGAGA	60
GTTGGAGGAC	ATAATTCATG	GATCATAGCT	CCAGAAGTGA	AAAGGGAGGA	AATGTAGACA	120
GAGGAAGGCA	TTAGCCATTG	AGAAGAATAG	GGACATATTT	TCTTTACTCT	CTGTGCAGAG	180
GAAGATAGCT	GGGGGAGTAT	AGACAAGTTG	TAAGAATGAA	GGAAGGAAGG	CAAGAGCAGA	240
CTTGTCGGA	GAATTTTATT	TTCTCTATGA	AGTTTGAGAA	TTAAACTTTA	TGCTGAGAAG	300
GAGGGCAGGA	GAGACTGTAT	ATGGAATGTA	AGGTTTGGA	TAACCAATGT	AAGTTTGGG	360
AATGAGAAAG	CCACCTAGGG	ATGAGGAAAA	AATATTTAAA	ATTTTGTATC	CACTGAAAAT	420
TCTTCAACAG	TGTAATAATGA	AGCATGCTCA	ACTGGAAATG	GTCATATATC	TAAAAGAAAA	480
TGGATTATT	TTGTTATTTT	TCTCTATATT	TGTAGTATTT	TACAGTAAGC	ATGTATTACC	540
TTTATAGTGA	AAAAGTGTCA	TTTTTTTACA	TTGGTCAATT	TTTTGTTATT	AAATTTTCATG	600
CTTGTTTTTA	ATTGTTTCTT	GTGTGTATGA	TTGCAATATC	AGGTATTTGA	TGTGGTGATG	660
TGTGTGATTC	AGAAGTCAGA	AGACTTAAGT	TCCGACACCC	CTCGAG		706

(2) INFORMATION FOR SEQ ID NO:925:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 651 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:925:

```
GAATTCGGCC AAAGAGGCCT AGGATTCAAA TTATTCTGAC AGACCTGTGT GGCAGTTCAG      60
GCTGATAGCT GGAGTTTCTT GTCTTTTCTT ACATGGCCTT TCATCTTCCA AGAGTTAGAC      120
TATGATTCTT CACATCATGA TGGCTTAGGG TCCCAAAAAG AAAAGAGTAG AACTTGCAAT      180
ACCTCTTAAG CCCTATGCCC AAGAACTCAT ACAGTGATAC TTCTGCCACC TTGTGTTAGT      240
CAAAGCAAGT CACAAGGCCA GCCAGATTCA AAAGAATGGA AAAATAGACT CAATTTCTCTG      300
GTGAGAAGTA GCAAGGTCAC ATTGCAAAGG AGTCTGGACA TGGGAAGGAG TTACTCATT      360
GTGGCCTTTA TAATAATCTT CCACAAATGC CTGTAATTTG GGCAGTGTGC TTAGTACTGG      420
TGATAGAAGA TAAGTAGCTT ATTTCAGTAT CTTAATTTTG TTTTATATAT TTGATAATTT      480
TATGATGCAG GTTCACTGTG CACTGGTATC AATCCCAGGG GAGGACTGTA AACACCTTGC      540
CAATACTGTG TACCACTA.C AATCCACTGG CATGAGTCTG GTGAGACAGA ACACACAATA      600
AGTTTAGGGA AGCAACTTTA TTACTCACAG ACAGGCAGCA AGGGACTCGA G              651
```

(2) INFORMATION FOR SEQ ID NO:926:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 700 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:926:

```
GAATTCGGCC AAAGAGGCCT AAAAAGATGA AAGGACCAAT CAAAGATTTA ATTAAAGCTA      60
AAGGGAAGAG TTTAGAGACA GAGAATGAAG AAAGAAATTC TAAGTTGGTG GTGGACAAAC      120
CAGAACAGAC AGTGAAGACC TTTCCACTGC CAGCTGTTGG TTTGGAAAGA GCAGCTACTA      180
CAAAGGCAGA TAAAGACATC AAGAATCCAA TCCAACCATC CTTCAAAATG TTAATAAATA      240
CTAAACCAAT GACTACTTTC CAAGAAGAAA CCAAGGCTCA GTTTTACGCA TCAGAGAAAA      300
CCCTCCTAAA AGAGAACTTG CCAAAGATTT GCCTAAATCA GGAGAAAGTC GATGTAATCC      360
TTCAGAAGCT GGAGCGTCTT TACTGGTTGG CTCAATAGAA CCTTCTTTGT CAAATCAAGA      420
TAGAAAAATAT TCCTCAATTC TACCTAATGA TGTACAAACT ACCTCTGGTG ATCTCAAAAT      480
GGACAAATTT GATCCCCAAA GACAGGAAAT TCTAGTAAAA TTACTAGATG TGCCTACTGG      540
TGATTGTGAT ATTTCTCCAA AGAATGTGAG TGATGGGGTT AAAAGGGTAA GAACATTATT      600
AAGCAATGAG AGAGATTCCA AAGGCAGGGA TCACCTCTCA GGAGTCCCTA CTGATGTTAC      660
AGTTACTGAG ACTCCAGAAA AGAACACAGA ATCCCTCGAG                          700
```

(2) INFORMATION FOR SEQ ID NO:927:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 378 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:927:

```
GAATTCGGCC AAAGAGGCCT AGGGGTGGTG GAGGCGTGGA CCCAACGGTG ACCGTCGGGA      60
TGGAGCAAGG GCAAGGAGAG GCTCTGGCCC AGACACAGCT TGAAAAAGCT CATCTCCCTC      120
TGGGGTTTAA AAATCAAAG CAAACGGAGC AAGCCTGGCG GCCCTGGGGA TGGGGCAGGG      180
```

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CCTCTACCTC ACTGTGATCT TCGACCTGGC GACACAGGAC AGCCACACAG AAGCACGCCA 240
ACACACTTAA AGCTTTGCTC CAACTAAATC ATTTAGTTTC CCTTGAAGAA ATAACTGAAA 300
AAAAAACAA CTGCTGACAT CTATGTCTGT AGCTCGATT TACAGTCTGC TCTTTGTGAG 360
AAAGGAAAT CACTCGAG 378

```

(2) INFORMATION FOR SEQ ID NO:928:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:928:

```

GAATTCGGCC AAAGAGGCCT AATATTTTAC ATTTCTCTTT TCTAAAAGTG TAAATTTTTC 60
ACTTTAAAT GAAGCAAGAA TTAAATAAAT AGAACAAATA CCATATATCA TCACAGAGTC 120
AATATATAT GGTCTGTTC TGACCAAGTG TTGCATTGTA TTGTGTGTAC CAGAACTGCA 180
GGGCTTTCTA TGGCTACATG GTCAGTGCAT GTCAGACAG CTGTTAAAT CAAAACCTTC 240
ACTGTGCTGG GTCACCTGGT AACTACTGTC TATCTCACAA GTGCATTCTG CTGACATTCA 300
AGGGTTAAAC TGGTTTCTAG TAAATACTGT GCTTTAAAGT AGTACATACT GTGAGCTGTG 360
TTATTAGAAA CCTGCTTGTC CTTGTGTCTG AAAATAAGGA GGAACACTCT CGCACCAAT 420
CTCGAG 426

```

(2) INFORMATION FOR SEQ ID NO:929:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:929:

```

GAATTCGGCC AAAGAGGCCT AGGTAAATGT TAGTGGAATA TTTTATGAGT ATATGCTGAA 60
AGGAGAGATT AGTTCACATG AACTCAATAA TGTTCAAGAT AATGAAATGC TTAGAAAGGT 120
TACTTTTGAT CCAGAAGTAT TTTTCAACAT ATTACTTCCT CCTATCATAT TTTATGCAGG 180
TTATAGCCTG AAAAGGAGAC ATTTTTCG AAATCTTGGG TCTATCCTAG CATACGCTTT 240
TCTTGGAACA GCAATTTCTT GTTTCGTTAT TGGGTCAATA ATGTATGGCT GTGTAACGCT 300
GATGAAGGTA ACGGGACAAC TCGAG 325

```

(2) INFORMATION FOR SEQ ID NO:930:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:930:

```

GAATTCGGCC AAAGAGGCCT ATGGACACCC TGTGCCCCAA GCCGATGGCC CCACCCAGCA 60
GCATCAGCAC AGNTGCCCCC CTTCTCCGCA GAGCAGGCTC TCCTTTACGG GACTCTCCTC 120

```



```

TTCCTCCCA CCTGATGCGC ATCAGCAGCC ACGGGCCTGG CCCTTGAATC TTGTCTAACT    180
GCACTCGCTG CTTGGTGGCC TCATCCCACC CCAAGACCAC TGCACTGATG GCTCCAACCC    240
CAACTTCTCC CTGCACTCAG CTTATGAATA CGACGGCCCT CATGTCATCC ATGCAGAGAC    300
CTCAGAGGCA GCTCAGCTCA GTGCTCAGCG TGGCACTCGG GGCTTCACAC TTCCCCCGCT    360
GTCCTGTCTG AGAAAAGTGT GACACCATCA ACCCAACTAA CTCGAG                      406

```

(2) INFORMATION FOR SEQ ID NO:931:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:931:

```

GAATTCGGCC TCATGGCCTA CCAGACTGTA AACATTCCAG GTCCTGAAAA AGTGTGGAC      60
CAGTCTCCTA CTGTTATGTT CTCCAGTTTT AAAAATGTAA AATCAGTTGA AACACTCGAT    120
CAGAAGGCAG ATGAAGTCCT TGAAGTGTAG AGTAACCAAA ACAGACCAGA TGAATGCAAA    180
AGTGAAGGTC AGTCAGCCAA GGAGATGCTA AGTAGTGACC AGAGAGAGAC TGTCACCGGA    240
CTCGAG                      246

```

(2) INFORMATION FOR SEQ ID NO:932:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:932:

```

GAATTCGGCC TTCATGGCCT ACTCCATTGT CACGCCAATT TCCCCTAGTC CAAGTTTTTT      60
CTTTGCTGAT TCCTTTGTCC ATGTGTGCTT TGAGCCTCTC TCATCTTGTC TTTCCTCCTT    120
TCCTAGGAGC AGCTCCTGAA GCAGCAGCAG CAGCACCAGT GGCAGCAGCA TCAACAGGGC    180
TCTGCCCCCTC CTACCCCACT GCCCCATCA CCACCACAGC CTGTGACCCT GGGGGCTGTG    240
CCAGCTCCAC AGGCTCCACC CCCGCCCCAC AACTCGAG                      278

```

(2) INFORMATION FOR SEQ ID NO:933:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:933:

```

GAATTCGGCC TTCATGGCCT ACGAGTGCGA CCAGCCAGAT GAGCGCCCGG TCCTGGTGAA      60
GAGCATTCAC TACCTCTACT TCTCCATGAT CCTGTCCACG GTCACCCTCA TCACTGTCTC    120
CACCGTGAGC TGGTTCACAG AGCCACCCTC CAAGGAGATG GTCAGCCACC TGACCTGGTT    180
TACTCGTCAC GACCCCGTGG TCCAGAAGGA ACAAGCACCA CCAGCAGCTC CCTTGTCTCT    240
TACCCTCTCT CAGAACGGGA TGCCAGAGGC CAGCAGCAGC AGCAGCGTCC AGTTCGAGAT    300

```

GGTTCAAGAA AACACGTCTA AAACCCACAG CTGTGACATG ACCCCAAAGC AGTCCAAAGT 360
 GGTGAAGGCC ATCCTGTGGC TCTGTGGAAT ACAGGAGAAG GGCAAGGAAG AGCTCCCGGC 420
 C 421

(2) INFORMATION FOR SEQ ID NO:934:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:934:

GAATTCGGCC AAAGAGGCCT AAAATAGCAA AGATGGAACA TGGACCTAAA GCAGTGACTA 60
 TTGCAAATTC TCCATCAAAG CCTTCAGAAA AGGATTCTGT AGTTTCCCTT GAGTCCCAGA 120
 AGACACCTGC TGACCCAAAA CTGAAAATC TAAGTCAAAC CAAAAAACC AAAGGATCTG 180
 ATAGCTCACT CTCTGGTAAC AGTGATGGCG GAGAAGAATT TTGTGAAGAG GAGAAGGAAT 240
 ATTTTGATGA TAGCACAGAA GAAAGGTTTT ACAAGCAGTC TTCCATGTCT GAAGATAGTG 300
 ATAGCGGTGA CGACTTCTTC ATTGGGAAAG TCAGACGGAC ACGAAAGAAG GAAAGTAGTT 360
 GTCATTCTTC AGTTAAGGAA CAAAACCAC TAGAAAAAGT GTTCTTAAA GAAGATACAG 420
 GTGAACTCA TGGGGATACA ACTCTCGAG 449

(2) INFORMATION FOR SEQ ID NO:935:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:935:

GAATTCGGCC AAAGAGGCCT AAAAATAGTG ATTTTITGAC TATCTATAGA TATTAGTTGG 60
 CATTCCTACTG TAAGGAAAAC TTTCTTTTCT CCTGTACTTA TTCATCGTCC CCCAGGAATC 120
 AGTCATTTTT CCAAGGAGAC CTAGTTCCTT TTTGTGAGGA GTTGTTTTGA GTTCATTTTG 180
 AAGTTCATTT GAAGTTTTGA GTTCATTTTA CTATAATCTG CCTAGGTGTG ATTTTCTTTT 240
 TATTTATTCT GCTTAGGATT TGCAGAGATT TTTTGAACC TGTGGCTTGA TGTCCATCAC 300
 TTTTGAAAT TTCTCAGCCA GCATAGTATC TGCAGACTGT GTGTCTGTTC CATTTTCTCT 360
 CTTTCTCCT TGTAGGACTT CATTCACAAG GATGTTAGAA CTTTTTACCA TGGCTCTCGA 420
 G 421

(2) INFORMATION FOR SEQ ID NO:936:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:936:

GAATTCGGCC AAAGAGGCCT ACAGGTCTAC TGGTAATGAT TTCCTTTACC TTCTAATTAT 60

ATAGAAATGT	CATAATTTCT	CCTTTATTCT	TGAATGATAG	TTTTGTGGGA	TATAGACTTG	120
CTGGATATAG	AATTACTGGA	TATAGAATTG	CCAGATATAA	AATTCTTGGT	TCAAAGTTTT	180
TTTTCTTGA	GGACTTTGAA	TGTCATCCCA	CTGTCTTCTG	GCCTCCATAG	TTTCTCATAA	240
TAAATCAGCT	GTTAATCTTC	ATTAAGTTTC	CTCTGTACAC	GAAGAGTCAC	TTGTCTCTTG	300
CTGCTTTCAA	ATTTTCTCA	TTTGCTTTGG	GTTTTCACAC	TTTAATTATA	TGCCTTTCTA	360
TGTGGATCTC	TTTGAGTTTA	TCCTGCTTGG	AGTTCATTGA	GCTTTTTCGA	TCTGTATATT	420
AATTTCTTTC	ATCAGATTG	GAGATGTTT	TGGCATTAT	TTCTCAAAG	TTCTTTCTGC	480
TTCTTTCTCT	CCTTCTCCT	CTGGGTCACC	ACAATGCATA	TGTTGGTCTA	CTTGATGATG	540
TCTCACAGGT	TCCTTAGACT	CTGTTTACTT	TTCTTCATAT	TTTTTTCTTT	CTGTTTCTTA	600
AATTTGGATA	ATTTTGGTTG	TCTTATATTC	AAGTTTGCTG	ATCTCGAG		648

(2) INFORMATION FOR SEQ ID NO:937:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:937:

GAATTCGGCC	AAAGAGGCCT	AGAGGATGGG	AAGCTTGGGG	AGAGAAGATA	CTGAAATGCT	60
AGAAACTGAG	CCAGTAGAGG	ATGGGAAGCT	TGGGGAGAGA	GGACATGAGG	AAGGATTCTT	120
GAACAACAGT	GGGGAGTTC	TCTTAAACAA	GCAGCTCGAG			160

(2) INFORMATION FOR SEQ ID NO:938:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:938:

GAATTCGGCC	AAAGAGGCCT	AGAAAACTC	AGGAAAGAAA	TTGCAGACTT	CGAACAACAG	60
AAAGCAAAAG	AATTAGCTCG	AATAGAAGAG	TTTAAAAAGG	AGGAGATGAG	GAAGCTACAA	120
AAGGAACGTA	AAGTTTTTGA	AAAGTATACT	ACAGCTGCAA	GAACTTTTCC	AGATAAAAAAG	180
GAACGTGAAG	AAATACAGAC	TTTAAAAACAG	CAAATAGCAG	ATTTACGGGA	AGATTTGAAA	240
AGAAAGGAGA	CCAAATGGTC	AAGTACACAC	AGCCGTCTCA	GAAGCCAGAT	ACAAATGTTA	300
GTCAGAGAGA	ACACAGACCT	CCGGGAAGAA	ATAAAAGTGA	TGGAAAGATT	CCGACTGGAT	360
GCCTGGAAGA	GAGCAGAAGC	CATAGAGAGC	AGCCTCGAG			399

(2) INFORMATION FOR SEQ ID NO:939:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:939:

GAATTCGGGC	AAAGAGGCTA	GAAGCATCGA	AAGCGTTGGA	GAGGTGTTAC	CGGTAACGGC	60
GGCGAGAAGG	GTGTTCCCGA	ACTAGAGTGG	GGCATACATA	ATCTTGCTGC	TATGCTTCGA	120
AGCTGTAGTC	TGAATCAACC	TAAGTTTAA	ACAGAAGGTG	AACCTCTGAG	ATAGAAAATC	180
AAGTATATTT	TAAAAGAAGG	GATGTGGGAT	CAAGGAGGAC	AGCCTTGGCA	GCAGTGGCCC	240
TTGAACCAGC	AACAATGGAT	GCAGTCATTC	CAGCACCAAC	AGGATCCAAG	CCAGATTGAT	300
TGGGCTGCAT	TGGCCCAAGC	TTGGATTGCC	CAAAGAGAAG	CTTCAGGACA	GCAAAGCATG	360
GTAGAACAAAC	CACCAGGAAT	GATGCCAAAT	GGACAAGATA	TGTCTACAAT	GGAATCTGGT	420
CCAAACAATC	ATGGGAATTT	CCAAGGGGAT	TCAAACCTCA	ACAGAATGTG	GCAACCAGAA	480
TGGGGAATGC	ATCAGCAACC	CCCACACCCC	CCCCTCGAG			519

(2) INFORMATION FOR SEQ ID NO:940:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:940:

GAATTCGGCC	AAAGAGGCCT	AAGAAATTAT	ACCATTTTAT	GGAATGTCAA	GCTACATCAC	60
CCGAGAAGAC	CAGTACAGCA	AGCCTCCGCA	CAAAAACTG	AAAGACCGCC	AGATCGATCG	120
CCAGAACCGC	CTCAACAGCC	CTCCTTCTTC	TATCTACAAA	AGCAGCTGCA	CAACAGTATA	180
CAATGGCTAT	GGAAGGGCC	ATAGTGGTGG	AAGTGGCGGA	GGCGGCAGCG	GTAGTGGTCC	240
CGGAATTAG	AAAACAGAAG	CGCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:941:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:941:

GAATTCGGCC	AAAGAGGCCT	AAGCCTCGCC	TTACACTTAA	GTGCACCCGA	TCCTGCCTCT	60
GGCATCTCAC	AAACGTCACT	CCCTGGAACA	AATTTGTGAA	GGCCTCCAGA	CCACAGTGTC	120
CTCATCTGTA	AAATGGGGGT	AGTAGTAATC	CTTGCCCTCAT	AAAGTTCTTG	GCAAGGATTA	180
GATGAGCGAG	CATGTGAGTT	TGGCCTCCGT	TAAACACTC	CATAAAGTTT	CCTTTTAGGA	240
TAACAGCAGG	CCGTTTTAGA	ACCTTCCAGA	GGTACTTAT	TCAGATATCC	TTAGGTGACG	300
ATTGGGAAGC	TGCCGTTTCT	TGAGAGCCTC	CTGGGTGACA	GATGGAGAGT	GGCCCTGGCG	360
TGACCCTTGA	CCCTATCCTT	GAGGCTTTCC	TGCCCGTCTC	CTGCCTCGAA	TGTGCTCCGC	420
AGCACATGGA	TCAGGATGGG	GAAGGGGCTG	TGTCACTGGA	TACCTTCGGC	CCCTGCCCCAC	480
GTCTAGGGCC	TGTGAAAACG	AGGAGGGACA	GCAAAGAAAT	GGGGAAAGGC	TCGAG	535

(2) INFORMATION FOR SEQ ID NO:942:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:942:

```

GAATTCGGCC AAAGAGGCCT AAAATTGTTA ATTCTAGTCA CCCTGCAGTG CTATAGAACA      60
CTGGAAGCTTA TTCCTCCTAT ATCACCCTAT TTTTGTATCT ATTAACAAAC CTCTCCATAT      120
CCTCCCTCCC TCCTACCCCTT CCCAACCTTT GGTAATCACT ATTCTCCTCT CTACTTCTAT      180
GAGATCAATG TCTTTATTTA CTCGAAGTAC TCTTAAAGT TTAGGACTTA AGTATTTGAA      240
GAAATTCAC TGCCTTTTGT TTTTATTCTA CTCAATACTT TTTAATATAA AGATTTACAG      300
TCCCCCCTTA CTCGAG                                     316

```

(2) INFORMATION FOR SEQ ID NO:943:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:943:

```

GAATTCGGCC AAAGAGGCCT ACAAACCTCAA GATGCCCGAG TGGATTGGAG GCGAGAGCGA      60
GCTCAGGAAG TTTCTAAAC ATCATTGCG AGGAAAGAAC TGTGAAGTCC TGCTGGTGTT      120
ACCAGAAGAG GTAGAGGCTC ATCAGAGTTG GAGGACCGAT GTGTAACAGT TCTGCCCAAC      180
CTCCCTCTCG CCTCAGCCCC TTCAGTCCTC TGTGACGTGC TGTGGCCTCT ACAGTGGGTC      240
TGCCCTTGCC ACTTCCCCAA ACATCTCATC AAGTTTTTCC CCTTCAGATC TGACAGTGCA      300
ATAGGACAGA CGTGTGGACT GTTATAAGAA CTACTCAGTG TTTTGTTCCT GGGCAAACCT      360
GAG                                     363

```

(2) INFORMATION FOR SEQ ID NO:944:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:944:

```

GAATTCGGCC AAAGAGGCCT ACTCTGACAG TGTTTCTGAC CTTTAGCATT TCTTTTGTAT      60
TCTTTCTTAG AATTCTCATC TTCTGCTTAT ATACCTGTCT ATTCTTGCAT GCTGTCTACG      120
TTTCCCATGA GAGTCCTTAG CACATTAATC ATGGTTGTTT TACATTCACA GTCTGGTAAT      180
TCCAGCATCC CTGCCACATC TGAATCTAGT TCTGATGCTT GCCCTGTCTC TTCAAACCTCT      240
GTTTTTTTGC CTTATAATCT TTTGTTGAAA GCCGAACATG ATTCCTGTAC TGGCTCTTCT      300
GGAGGCTTCT GCCCTGTTCT CGAG                                     324

```

(2) INFORMATION FOR SEQ ID NO:945:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 712 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:945:

```

GAATTCGGCC AAAGAGGCCT ACAGATGACT TCATTTCTCT TGGATTCCAC TTCTCAGCT      60
GTCAGAATGG GAGAGGAAGG GAGGTGTTGG GATAAGTTTC AGTTCCACTG TTTGTACTTC      120
TCGTCTGGCT AACACCCATG TGGCAAATAG GTTTCATCAT TTGTTTCAGC TTAGATTTGT      180
TGACAGCGGT TTCCTGGAGT GCTGTCTTGA GAACGATTCT GAGGAGGCTC AGCAAGAAAG      240
AGTGTTTCAG TTGATTGGGT GTGTCTGTCA TGGAGAAGGA AGTAAGGAGT GGGCAGTGCCT      300
AGCAAAATTC CCGGGGCACT TCTGTCCATT ATCTCAATAC CTGGGGTTGA CATTTCCTGT      360
CTCAGATCAG GAGTCCTGAC TACCCTGCCT CTGACCACTC GAACTGAGTG CTGCTTAGCT      420
GTATCGTAGA CACCGCCTGT TTGTGAACAG ACACCCCTGCT TCTTGATAAC ACAAGGCCA      480
GCAGGGTCCA CTGCTGTGTG GAATGSCCTT CGGTCATTTC TGCCCAGAGC ATAGAGGTCA      540
TTTTCACTAA TAACATAACT CTCCTTTTGA TTGAAAGTGT TAAAATGTTC CTCCTAAAAG      600
CACTTATTTT TTAGGCTCGT TCTTCAGATT TGCCCCATAT CCTAAGCAAA ATGCCCTCAA      660
TATGAAGTGG ATATTGCTTG ACCGTAGGGA GCTTGTCCAT ACTGTACTCG AG              712

```

(2) INFORMATION FOR SEQ ID NO:946:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:946:

```

GAATTCGGCC TTCATGGCCT AGTCTTGAAG GATAAGACTT GCCCAAGTGG ATAAGGGGCG      60
AAAGGCATCC CAAGAGGAGA CAGTAACGTG TGTATAAATG AACGAAGGCG TGAAATAGGA      120
TGGAGTGTTT TGAGGAACCA CAAGTAGCCT TCTCTGAGTA AGAGCATAGG TTTGTGAGGA      180
GGACCTAGTG TTGTTTGAAG AAAGAGAGTG ATCAATGGAA GATGAGATAT CAAGACAGGA      240
GAACCAAGGA AGAAAAAGCA GAGGACAGCT GGAATGAATC AAACCGAAGA ACCAGGATCC      300
TCGAG                                     305

```

(2) INFORMATION FOR SEQ ID NO:947:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:947:

```

GGGTTTGTGTT AATGGAAAGT TTAAGTAAAT TATATTGTAA TAAAAAGGTA GATAAACCAT      60
TGTAACAACAG TATTCTAGGC CGCCAACAAA AGTGTGACAG ACACACTAAA AGCCCTCCAA      120
CTTTAACTTG TAACGTAGCT TCATTCTCAA AGCTGACTCC TTTTCTTTCT TTTTCTTTT      180
CTTGAGTGTA GTACAGTTAA AATTTCAAAC AGCTCCTTGA CACTGCTTTT CATGTTCAAA      240
CCAGCCATTT TGTGTACTT TGGTAAAGGA CCTCTTCCCC TTCCTCCCTT ACACATACAG      300
ATACACCCAC CATAACTCGA G                                     321

```

(2) INFORMATION FOR SEQ ID NO:948:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:948:

GAATTCGGCC	TTCATGGCCT	ACAAAAGGCA	ACAAACAAGA	TTAACATGGA	ATTATAAAAA	60
TCACTCAATC	CAAAATAAGG	CAGAAGAAGT	GGAAAAGGGA	GATGAAGATC	AGATGGAACA	120
AAGAATATTA	CTAGAAATGA	CTATGTTTTA	TAATGCAAAA	TAGTTCAGTA	CAGGAGAAAG	180
ATACAATAAT	TTGAGTGCAT	ATGAACCTAA	AAGAGAATTT	CAAAATATAT	GAAGCAAAAA	240
TTGACAGAAC	CCAAAAGGCA	ACAAACAAGA	TTAACATGGA	ATTATAAAAA	TCACTCAATC	300
CAATATCTCG	AG					312

(2) INFORMATION FOR SEQ ID NO:949:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:949:

GAATTCGGCC	TTCATGGCCT	ATAGGCCATG	AAGGCCGGGA	GCCTCAAGAA	AAATTAGCAG	60
AGGAAAATAA	TAGGTAGTTA	CTATTTAGGG	TAACTAAAC	TGTTCTAAGG	AATAGAAAAT	120
AAAAATTCCA	TGTCTTCAA	AATAATTCTT	CCCTCTCAAT	CTCTCTGAAT	ATCTCATAAG	180
AGTATTTCAGG	CCACAGAAAT	AACTACCATT	TAGCCACTCA	GAGGCTTATA	GTAGTTCTAC	240
TAACTTTAAC	ATTTGGCAAC	CAAAATTACT	CTAAGAATCA	TCACCCTCGA	G	291

(2) INFORMATION FOR SEQ ID NO:950:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:950:

GAATTCGGCC	TTCATGGCCT	AGATGGGCAT	TCTGTTTATC	TTACTAGTAG	TACGCAGGGT	60
ATGTTGAAAT	CTCCAATGT	GATGGTGGAC	CTGTCAACTT	CTCCCTGTGG	TTTTATCAGT	120
TTTTCCTGGG	TATTTTGAGG	CTATTCTGAT	AGGTACATAA	AATACAAAAA	TTGCTATATC	180
CTCCTAATTA	ACACTTATTA	TCAAATTGTT	ACTAATGCCT	TCTGTTCCCTA	GGCCATGAAG	240

(2) INFORMATION FOR SEQ ID NO:951:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:951:

```

GAATTCGGCC TTCATGGGCT AGATCTGAGC TCACTGCAAC CTCTGCCTCC AGGGTGCAAG      60
CCATTCTCCT GCCTCAGCTT CCCAAGTAGC TGAGACTACA GGCGTGTGCC ACCACGTTGG      120
CTAATTTTGT TATTTTGTAGT AGCTTTTTTT TTAAACCCCT GAGTGTGAGG TGTGAGGTAG      180
TAGAAGAAAG GTAGTGTGTG TGACAGCTTG TGAGTACTTA ACTAATTCTT GTTGCAATTCA      240
CTATAATATG GTAGTTGTGT ATACATTATG AGGCAATTAG GAATAGGGAA CAGAATCAGC      300
AGATACTAAC GGAGTTAGAG ATGTTTGCTG AAGTCATGGA AAGCCATCAT TACTTTTTC      360
TTCCTTCCTC ATAAGGCCTT AGTGGGTGTG GCGTTCAGCT CGAG                      404

```

(2) INFORMATION FOR SEQ ID NO:952:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:952:

```

GAATTGGCCT TCATGGCCTA GAAAAATCAT GTGGGAAAAC CACTGCTGAA AATGGATTTA      60
AATTCAGAAC AGCGGAACA ACTGGAAGA ATCAATGATG CTCTTTCCTG TGAATATGAG      120
TGCCGCCGAC GAATGTTAAT GAAACGATTA GATGTGACTG TACAGTCCTT TGGATGGTCT      180
GATAGAGCAA AGGTAAAAAC AGATGATATA GCAAGAATTT ATCAGCCTAA GCGTTATGCT      240
TTGTCACCCA AGACAACGAT TACAATGGCA CATCTACTTG CTGCTCGTGA AGATCTATCC      300
AAGATCATTG GGACAAGTAG TGGCACCAGC CGGGAGAAGA CCGCATGTGC CATTATAAAG      360
GTGCTGATGG GAAGGGCTCG AG                                         382

```

(2) INFORMATION FOR SEQ ID NO:953:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:953:

```

GAATTCGGCC TTCATGGCCT AGTCCCTCTT CCACTGCATT TCGGCTTCAT ACATGCACAT      60
GATGTCCTCC TCCTTGCACT CAGTGATGTC TGGCACGCGG CGGTACTGCC GGTGGTAGTA      120
GTAATACCTG TTCTTTGCGT GCTGCCGCTC TATAAATTCT CTCACGAGGG TCACGGGTCTG      180
GTCCACGATG AGGTGCAACG CTTTCATCAT GTAGACGATG GGATTGGGCT GCACCGGCGT      240
GCGGCGCGGG GGCTCAGGCT CGCTCGAG                                         268

```

(2) INFORMATION FOR SEQ ID NO:954:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:954:

```

GAATTCGGCT TCATGGCCTA AAGATTCTGC TCTTTATACA CAGAACTTTG TATAGAGTTC      60

```


TGGAATGAGG AAGTGTGAGG AGGGAATCAG TGCCTCTCGG AAGTCGTTTT AATTAGAATG	120
TGATTTTTTT TTCTTAAACG TGTCTTCATT GGCTCCCAGA TTGCCGCTAG AAACCAAGCA	180
AACTGGGTGC TAAACAGAA AGGCCCATAG ATTGTACTTT TTGAGCTGTT TGAATTTGTA	240
TACCATATGC ACAACTCGAG	260

(2) INFORMATION FOR SEQ ID NO:955:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:955:

GAATTCGGCC TTCATGGCCT AATCCGAGTG TTTGCGGCAC GTCCTAAGCT GACAGTCCCT	60
CTGGACAGAG TCCCTGGAGT GGAGTCACTG CTCCTTGCTCT TTTTTCATA ACATACACTC	120
ACCCGTATG	129

(2) INFORMATION FOR SEQ ID NO:956:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:956:

GGCTAAACAT GGAATGAAA GACTGATACT TGCTACCACA AAAANANACT TAAGCACATA	60
GATCATAGAC AGTATAAAGC AATTAGACAA TGAAGTCTAC AAAACAACCA GTTAACAACA	120
CAATGAGAGT ATCAAAATCT TACATGTCAA TACTAACCAT GAATATAAAT GATCTAAGCC	180
CCCCACTTAA AAAGCATAGA GTGGCAAACCT GGATAAAGAG ATAAGACCCA ACTGTCTGCT	240
GCCTTTGAGA GACCCATCTT GCATGTAGTG ACACCCACAA GCTGAAAGTA ATGAGATGGA	300
GAAAGATCTA TCATGCAAAA GGAAAACAAA AAAGAGCAAG TATCACTATT CTTATATCAG	360
ATAAGACAGA TTTTAAACCA ACAACTATCA AGAAGAACCT CGAG	404

(2) INFORMATION FOR SEQ ID NO:957:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:957:

GAATTCGGCC TTCATGGCCT AGACTCTCTT TATACAATTC ATCAAGGTTA AACAAAACAT	60
AAAATTCCCT TAAAAATAGG GTAATAAAAT AGATGAAATT TGTATCACTC AATTGGTGA	120
TACTAGTAAA AACTATAGTT CATATTTATA TACAAATAAT ACAGTCTGTA AAAACAGTCT	180
TAGAATTAA ATAAGCTATC TAAACGTGTT AAAATTTTAA ATCAGGACCT GATTGTTTT	240
GCTTTCATT AAATGTCACA TTGAATTCTA GACCTGCCTC GAG	283

(2) INFORMATION FOR SEQ ID NO:958:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:958:

```

CTCGAGGACC TGGTCGTGAC CAACTATAAG ATGGGGGGGC GACATTGCCA ATGGGGTACT      60
TCGGTCCTTG GTGGACGCAT CTAGCTCAGG TGTGTCAGTA CTGAGCCTGT GTGAGAAAGG      120
TGATGCCGTG ATTATGCAAG AAACAGGGAA AATCTTCAAG AAAGAAAAAG AGATGAAGAA      180
ACGTATTGCT TTTCCACCA GCATTTTGGT AAATAACTGT GTATGTCAC TCTCCCTTT      240
GAAGAGAGAC CAGGATTATA TTCTCAAGGA AGGTGACTTG GTAAAAATTA GGCCTCTTTG      300
GCCGAATTC

```

(2) INFORMATION FOR SEQ ID NO:959:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:959:

```

GAATTCGGCC AAAGAGGCCT AGATTGAATT CTAGACCTGC CTCGGACTAC TGCAAGTGCT      60
TAAAGGCATT ATTCATAGA CCTTACAAC ACCCATATAA CATTATTATC TTCATTTTAC      120
AAATGAGGAT AATAATGTTA TATCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:960:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:960:

```

GAATTCGGCC AAAGAGGCCT ACACCGTAAT ACTATAATAC TATATAATCT GTTGTGTAAT      60
TTTCTGAGAA TAATAACTCA ATGGAGTAAC TCTTTAATAG GCATCTTTTC CTTATAAAAA      120
ATATTGTAGA TTGGCTCTCT GCAAGCTAAT TTCTTTTATA TGGTTAATAT TTTAGTGAC      180
ATTAAGAGCT TAGAGTTCTT TTTGTAATCA AGCTTGCTAC AGAAGCTGTG CTTTATTTAT      240
TTCATAGTAA TTTCTCTAG TGGGTCATTG TATAAACCCCT GATCATTTT GTATGTCTAT      300
TCCTTTTCTT GCGAAGTGGG CAGCTTGTTT AGCCATGGTG TTTTGGCTTC AATAGTGAGG      360
TCTCTATTTG GGAATCTCTG AATTTACAG GAATGAGTAG AACTATATTT AACAAATGAAA      420
AAAATAGTAT TAGATTTTAG GGCAGCTGGC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:961:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 207 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:961:

```
GAATTCGGCC AAAGAGGCCT ACCCTGTCTT TATGCTCCAA TGCTTCTTTC TCCAGATATG      60
AAAGGAGATG CTCTCTATCA AATGGCCCTG TGGTGGACTT TGATGTCTGG TTCTTCTGCC      120
GGAACCCCTGC TGGCTTTTTC CTGTAGCTCC ACATTCTCTG GCATTGAGGG GTTAACATTA      180
GGCTGGGAAG ATGACAAAAC TCTCGAG                                         207
```

(2) INFORMATION FOR SEQ ID NO:962:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:962:

```
GAATTCGGCC AAAGAGGCCT ACTGTAGTAT TTAAATATCT GTTACAGGTT TCCAAGGTGG      60
ACTTGAACAG ATGGCCTTAT ATTACCAAAA CTTTATATTT CTAGTTGTTT TTGTACTTTT      120
TTTGATACA AGCCGAACGT TTGTGCTTCC CGTGCATGCA GTCAAAGACT CAGCACAGGT      180
TTTAGAGGAA ATAGTCAAAC ATGAAGTAGG AAGCCAGGTG AGTCTCCTTT CTCCAGTGGA      240
TCTCGAG                                         247
```

(2) INFORMATION FOR SEQ ID NO:963:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:963:

```
GAATTCGGCC AAAGAGGCCT ACAAGAACAT GAAACATCTG TGGTTCTTCC TTCTCCTGGT      60
GGCAGCTCCC AGATGGGTCC TGTCCCAGGT GCAGCTGCAG GAGTCGGGCC CAGGACTGGT      120
GAAGCCTTCG GAGACCTGT CCCTCACCTG CGCTGTCTCT GGTGGCTCCA TGAATAGTCA      180
CTACTGGAGC TGGGTCCGGC AGCCCCCAGG GAAGGGACTG GAGTGGATTG GATATATCTC      240
TGACAGGGGG AGCACCAACT ACAACCCCTC CCTCAGGAGT CAACTCACCA TATCACTAGA      300
AACGTCCAAG AACCAGTTCT CCCTGAATTT GTTCTCCGTG ACCGCTGCGG ACACCGCCGT      360
ATATTACTGT TCTCGTGGGA CATCCCCCCC CCCTCCTAC TACTACTCCA TGGACGTCTG      420
GGGCAAGGGG ACCACGGTCA CCGTCTCCTC AGGGAGTGCA TCCACCCTCG AG                                         472
```

(2) INFORMATION FOR SEQ ID NO:964:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:964:

GCTCGGCTCG	CTGCAACCTC	TGCCTCCCAG	GTTGAGCGA	TCTTCTGCC	TCGGTCTCCC	60
AGGTAGCTGG	GACTACTGGC	GTGCGCGACC	ACGCCAGCT	AATTTTGT	ATTTTAGTG	120
GAGACGGGT	TTCACCATGT	TGGCCAGGAT	GGTCTCAATC	TCTTGACCGC	GTGATCTGCC	180
TGCCTCGGCC	TCCCAAAGTG	CTGGGATTAC	AGGCTTGAGC	CACCGCATCC	AGCCAACATT	240
TTTCAAATAG	AAAATCTGAA	GCTAAATCA	CCCCTAAAGG	ACAAATAACA	GGACTATCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:965:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:965:

GAATTCGGCC	TTCATGGCCT	ACTAGATTAT	GGATTTTTTT	ATTTCAATGG	AAGTGAAGTT	60
CAAAGATGCC	AGAGTGGTAC	AGTTCGAACA	AACTGCTTGG	ATTGTCTTGA	TAGAACAAT	120
AGTGTGCAGG	CATTCTTGG	CTTAGAGATG	CTAGCTAAAC	AGTTGGAAGC	TCTTGTTTA	180
GCTGAAAAGC	CTCAGTTGGT	GACTCGCTTT	CAAGAAGTTT	TTCGGTCAAT	GTGGTCCGTG	240
AATGGTGATT	CAATCAGTAA	GATATATGCA	GGAAACTCGA	G		281

(2) INFORMATION FOR SEQ ID NO:966:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:966:

GAATTCGGCC	TTCATGGCCT	AGACGTGATG	TGTTGAGAGA	AGAATGTTCT	AGGCAGAGGC	60
AACAGCAGAT	GCAAAGTCT	GAAGGGGAGA	CAGACCGAGC	TAGAAAAGCA	TGGCACATCA	120
GTGATCTAAG	TTCGTGTGGT	TTCCTAAGGT	TGGAACCTAG	GGTGCAAACT	GAGGATGGGC	180
AGATGAGGTG	GAAGAGGAAG	AGCAGACCCA	GGTCACAAAG	ATCTTTTGTG	CTAAGGATTT	240
TTAAGCAGGT	AGGAGGAGAG	AGAATATGAG	CCTTGGGATT	TGAAGTGCTG	TGGGTGTACA	300
GAAAAAGAGA	AACTCAACGA	GAGGTTTAGG	TTAGGGACG	TGGTAGGCTT	TTGCAGTAAG	360
GGACAAGGAC	AGAAGGCTCA	TCTGAGGATG	GGAGGGACAC	TTTAGAGGCA	AATCCATAGG	420
ATGCAGTGGC	TGAACAGAAA	AGGTGAATCT	CGAG			454

(2) INFORMATION FOR SEQ ID NO:967:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:967:

GAATTCGGCC	TTCATGGCCT	AGTCATTTAA	TTTAACTTAG	CAAACTCCA	ATAGTGTAA	60
TTAACAGATT	TTGGAAACTG	GTTTAAAGTA	GATGTATTAT	AACATAAAAC	AAAGCTAGCC	120
ATTATCAAGT	TATTTCTTGG	TTAGCTATTT	TTACAGCATG	TGCATGTTAG	GTAGTCATCG	180
TGAAAGCAAG	AATCTTAAGT	TAAATACATG	TTTTTTTGT	TTGTTTGT	TACTGCTGTG	240
CTGTATAATA	CATGATGCTG	TTAGCAGCGG	AACGTATCAG	AGACACGGCA	CCAAAGTATG	300
TTACTGTCGG	CGAAACTCG	AG				322

(2) INFORMATION FOR SEQ ID NO:968:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:968:

GAATTCGGCC	TTCATGGCCT	AGACTGCTGG	CATATCCACC	CCACCTGTGC	TGCTGCCCCC	60
GCCAATCCAT	CAGGGCAGCT	CGACTCCTG	CAGCACCAC	CGCCCAGGAC	GTCAGCTACT	120
CAGGTTTCT	GGCTGCTGGG	GTTCCGACG	AATGGGCCCT	TCTTTGGGA	AAATGCCAGG	180
GAAGGGGAAC	GGCTGGGCTC	GGGCGCCACA	GCTTGTCCTT	CCAGCCAGCA	GGCACAGATG	240
TATGGCGCAG	GAGGGACAAC	TGGCCCTGT	GGCCAGCCCC	AGAGAGACGG	GCCCTTTCTT	300
TGGGACCCTG	GCCTCAGAGG	CCTGCGTGTC	ACAGCTCAGG	GTCTGGCTGG	GCAGGGGCAA	360
AACCTGCCTT	ATTTGCCAGA	TGTCCAGAA	GTACACAGGA	GCAGACGCAC	CACCTCGATG	420
GCTATTTTAG	GAGGCTGGTG	ACAAGCAAGG	CATGGTGGCA	GGAAGCCAGG	CCCTCGAG	478

(2) INFORMATION FOR SEQ ID NO:969:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:969:

CTCGAGGTCC	CTGTCCTGCT	CAGTTTCTCT	TCAATGTGGA	AGTCCTGGGA	GGTCAGTCTC	60
ATGAGAATAA	GGTGCTGTAC	TTTCACAGCC	TTCTCAGACT	TTCTGAGGA	TGGCCTTACA	120
CTTGCCAGCT	AGTGGAGTGA	GCAGAACTCC	TCCTGGTTTC	TGTGGCTGTT	CTCAGAATGC	180
CCTAGTTCAC	TTTCCAGTAA	TACTTTTTTG	GGAACATTTT	GTGTTTCTCA	TTTTCTCAGG	240
TCCCCCAGGC	ACACCATCTT	TCCTCTGCTT	CCTCTCACAC	AGGTGCTGAT	ACTGTGTAGG	300
TTTGGGGCTG	TTGTTCTGGC	CCACTCCCTG	ATATTTTCTG	GGTTTGTGAC	CTAGTTTCTT	360
TAAAAGTATC	ATCTACATGG	TTTGGTTTC	ACTATCTATT	CTGTCTTTAT	TTGAACACTA	420
GGGGAATTC	ATTATGCCAA	TCTCACACAT	TGTGTGATTC	CATTAGGCCA	TGAAGGCCGA	480
ATTC						484

(2) INFORMATION FOR SEQ ID NO:970:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:970:

GAATTCGGCC AAAGAGGCCT AGGCAAAATG AAAATACTTG TGGCATTCTT GGTGGTGCTG	60
ACCATCTTTG GGATACAATC TCATGGATAC GAGGTTTTTA ACATCATCAG CCCAAGCAAC	120
AATGGTGGCA ATGTTTCAGGA GACAGTGACA ATTGATAATG AAAAAAATAC CGCCATCATT	180
AACATCCATG CAGGATCATG CTCTTCTACC ACAATTTTTC ACTATAAACA TGGCTACATT	240
GCATCCAGGG TGCTCTCCCG AAGAGCCTGC TTTATCCTGA AGATGGACCA TCAGAACATC	300
CCTCCTCTGA ACAATCTCCA ATGGTACATC TATGAGAAAC AGGCTCTGGA CAACATGTTT	360
TCCAGCAAAT ACACCTGGGT CAAGTACAAC CCTCTGGAGT CTCTGATCAA AGACGTGGAT	420
TGGTCTCTGC TTGGGTCACC CATTGAGAAA CTCTGCAAAC ATATCCCTTT GTATAAGGGG	480
GAAGTGTTG AAAACACACA TAATGTCGGT GCTGGAGGCT GTGCAAAGGC TGCACTCGAG	540

(2) INFORMATION FOR SEQ ID NO:971:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 289 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:971:

GAATTCGGCC TTCATGGCCT AGCCAGTCTC AGCACTTAAA CAACCAGGTG TTGAAGGACT	60
ATGTTCCAAA GAACAGAAGA GAGTATGGTT TGCAGATGGT ATATTGCCCC ATGGTGAAGT	120
TGCAGATACA ACAAATTAT CATCTGGAAG TAAAGATGT TCTGAAGACT TTAGTCCTCT	180
CTCACCTGAT GTGCCTATGG TAAGGAATTC AAAGAATACT TAATTGACTA AACAAAATT	240
TATTTCTAG ATAATTCCTG GTGTGATTAT TAGAGTGCTT TTTCTCGAG	289

(2) INFORMATION FOR SEQ ID NO:972:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 418 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:972:

GAATTCGGCC TTCATGGCCT AGAGCTTGGG AGGTTGAGGC TGCAGTGAGC TATGAGCTGC	60
ACCACTGTAC TCCAGCCTGG GTGACAGGGC AAGACTCTGT CTCAAAAAC AAAACAACA	120
ACAAAACTT TATTCTAAA AAGTGCTGAC CCAGAGATAA GAAGCAAGCA CATGGTTGGT	180
AAAATGACAT CAGTGAGCTT GCTTTATGCA GGGTTGCCCC AAACCTTCAA TTTGTA AAC	240
TCAAAATATC TGGAAAGCTT GGTGAGGCGA GCGGGGACTG TAACTCAGCA CTCACCGCAG	300
GGTGAGACCC TTAGGGCAGC GGGTGCTACA CTGAACAAAG CGGTGAACAG CCCCTCGTG	360
AGAGGGGGTT CTTGGCAGAT GACGCCAGCA GCTGACAAAC AGGCAAGTGC AACTCGAG	418

(2) INFORMATION FOR SEQ ID NO:973:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 276 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:973:

```
GAATTCGGCC TTCATGGCCT AGATTGTAA AAGATTTTCC TAGATTACT GTGTCTGGA      60
TCTAGCTTGA ACGTGAATGT TTGTATAGTA CGTTTTCTTA ATATTTTITA GTATTCATAG      120
TATATAATCA TACTAAACTT GAGAACTGG AAGAATCAAG TCTTCCTCAG TTCTGTTTAG      180
ACTTCTAGT TTTTTTAAAG GATACTCCA TATCTTCTGT AAGCTACACA GTGAGCTTCA      240
TTTTTGACA GTTATAATAC ACTCTCGAAT CTCGAG                                276
```

(2) INFORMATION FOR SEQ ID NO:974:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 379 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:974:

```
GAATTCGGCC TTCATGGCCT AGGGTTCGAT GATAAGCACA GGCGGCAGCT GGATTGCAAG      60
TGGAGTGGTA ATGGCCAGAA CAGCCTCTTT CTGTTTTCGA TTAGTCGAG GATCCAACTG      120
TTCATCCCAT TGTCTGTTAG GACTCCATGG TATGGTGGGA GTCATACTGA TGTCTGGAAA      180
CAAAACCCCA TTGTCCTTGA TCCTGTCTAG TGCATAGTGC ATTTCACAGA GGGGTAATCG      240
ATTTAATTGA AACTGAAGTT CAACCTGTGT GTCACAGTCA GGCCGAAGAT TAAGTCTCTC      300
ACAGCATTCC CTAGATAGCC TTAATAATAT ATATTCCTTT GTTTTTCTT CAATAGTAGC      360
TCCTAGACC TGCCTCGAG                                379
```

(2) INFORMATION FOR SEQ ID NO:975:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 417 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:975:

```
GAATTCGGCC TTCATGGCCT AAGAGAAAGA GAGTGAGAGA GAGAGAGAAA GAGAGAGAGA      60
GATGCTGTTG AATCAGAAAC AGATCAACAG CCCAAAGATT TTCCTGTCCC TGGAGTGCCA      120
GCCCCAGGAA GCTCCAGGGC TGAGTGGTCA GGAGCCAGTT TCTCCAGCCC CTCCTCCCCA      180
CAACCCCTAG TGGGGAGGGG CAGCTGTCCA TTTGCCCAAA GTATTAATGC AACTGAAGCT      240
GTGATATTTT CAACGACTGT AGGAGGAAAA ATTAAGGGGA GAGAGGAAAA CAAACCAAC      300
CAACCCCTAA AATCATTTTC TTATTGTACA TAACGACCTC ATTCTCCTGT ATATGCGGAA      360
GATATAACCT TATATTTGGT AAGTGTCTT TGTGCTATTT TATCACGCGA CCTCGAG      417
```

(2) INFORMATION FOR SEQ ID NO:976:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 154 base pairs
(B) TYPE: nucleic acid

- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:976:

GAATTCGGCC TTCATGGCCT ACACAGAAAA ATTCAACAA TAAAAGTTCT TAATTATGGG	60
AAATAGTTAC ATGTGTGTTA TATCATTTAT GGCTCATTTT GTATTTTAT TAAAAAGTAT	120
TAAAATCCCA ACAGTAACAG CAATACAACG CGAG	154

(2) INFORMATION FOR SEQ ID NO:977:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 252 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:977:

GAATTCGGCC TTCATGGCCT AAATTGTTCT TTGCTCAAAT AAAGTGTAA ATTATCTTG	60
GCAGACTCTA TTTTGATCCC CAAATTGAT TTAGATTGG GCCATTAAA TTCACTATT	120
TAATAATAAC CCTACTGGAT GAGAATAAGT GTTCTCAAT TTCTGGTGAT ATGGTTGGC	180
TGTGTCCCA CCCAGAATCT CATCTGAAT TATATCCCC ATAATCCCA CGTGTCAACG	240
GCAGGACTCG AG	252

(2) INFORMATION FOR SEQ ID NO:978:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 251 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:978:

GAATTCGGCC TTCATAGCCT AGTTTAGTTC TCAGAATTCT TCATATATTT TGGCAGCAGT	60
TTTCCATCA GATTATTTT TAAATATTTT CTCCAGTCT GTGACTTGCT TTTCCATTC	120
TCTTAACAGT GTCTTTCACA CAACAGAAGT TTTTAATTTT AATGAGGCTC AACTTAATTT	180
TTTTTTCATT AGTAGATTGT GCTTTTGGTT TTGTATCTAA GAAGCCATCA TTGAACCCAG	240
GATCGCTCGA G	251

(2) INFORMATION FOR SEQ ID NO:979:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 534 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:979:


```

GAATTCGGCC TTCATGGCCT AGAAGGCTTC TGAATAATTT CTCAAAAC TA NCTTTCCATT      60
TNAGTACACG ATTTGATAAA CATAGCACAT TAGATAGGTA TTTAGCAATT TCTTCTACCA      120
ACTACACTTT GCCCTCACTA AGGGTTAGAG TATGATTGTA AACAAATTTCT ACATATAAAG      180
CATCTTTAAA TAAGTTTGTG GTTCACTGAA CTGAGACTTC TTTCACTTAT GTACCTATGG      240
AAGTTAATCT GAGCATAAC ACATATACAT ACTTGCATAC ATATGTGTAC ATATGTTTTT      300
TAAGTAAGTN ACTTTTACCA TTAGAATAAA CCTAGACACT ACAGGGACAA CTCTGGGGAA      360
CAGGGCGGTC TGCCTTAACA ACCCTTCTCT AGGTTGAGGA AGGCAGGTAT AGTTCACTGA      420
AGGATGTGAT GAGGCTGTAG TAAGTCTTCT CATCATCTGT TAATCCTGCG TTGCCTGGTC      480
TCACCACCAC AGCTACGTGC ACATCTGCTT CCTCAGCAGC ACTGGCCTCT CGAG          534

```

(2) INFORMATION FOR SEQ ID NO:980:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:980:

```

GCTCGAGTGT CGTGCTATCT CTAAATTGTG ATCACTAAGA ACCGCTGCGG AAACAGTAAC      60
TGTTTCTTTT ATTTTGTACA TTTTAGTTTG TAATTTATCC AATTCTTTCT TCTTTTGATA      120
AGTCTCCATT CTCTTTACTT CACGGGTATT TTCAAATTC TTAATCATT TATCACAGTG      180
CCACTTGTTA GACCCTAATG AACGATGTCA CCCTCTTATC AAA          223

```

(2) INFORMATION FOR SEQ ID NO:981:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:981:

```

GAATTCGGCC TTCATGGCCT AATTACTTGA CCCGTAATAG GGTGTGGCC GTTTTCTGAT      60
GCCTAAGTAT TATACAGAGC CCACAATGGC CAGTTTACTA CCAGAAAGGG CTTAGTAAG      120
ATATTCTTGG ACTTGATACT TTCTTCAGAT CCTCTTTGTG CCAAGATAAT TTATCCAGTC      180
ATTGGGAATA GTAAGTTTCT GTGTAACCCA TCTCAATTAT AGAAGCAAGT TCAGCTTTAT      240
GTATTTGTAT GGGGAGTTGA AGATTCAGAT AGAGGTATTA AGATGTGTGG CATTTACTTA      300
AACCATCACA TTTTTTCTT TCTACGCCCC CTTGCCTGTA AAACACCTGG GAAGTTCCAC      360
TGGTGTATC CATCCTGATG CTTGAGACCA CCTCCCTTC TTCACAGACC GTGTCACTTT      420
GCCTGTGGGT GGGGGCTAGC CAGCCACCAC CCTCTTTTCT GTGCTGCCAG CCAATCTCGA      480
G          481

```

(2) INFORMATION FOR SEQ ID NO:982:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:982:

```

TCCGTGTCCC CTCCTCCCTC TGCCCCCAGT GTTCTTCTG ATTTTTTTT CCCCTTTCCC      60
TCCCTCCCTC TCCGCATTCT TCCCTTGGTT CAGCACAGGT AAAACGGTTC CCCTCCCTCC      120
CTGCCTTCAT GGATCACCAG CTCACGTCAT GTTGCCTTCT CTTTCTTTG TGTGTGTGTT      180
TATTTAAGTT ATTTTCTTC CTCCTCTCCC TTTTCTTTT GGCCCTCCCT CCCTCCCTCT      240
TCTGCCATGT AACTGGAGGA TGTGCTATGA GTTTGCAAAC AGCCGGACTC GAG              293

```

(2) INFORMATION FOR SEQ ID NO:983:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:983:

```

GGTGAGGATG GTGGCTGTGG TTGTGTTGGT GGCTGTGATG GTGAAGGTGG CTGTGGTGGG      60
GATGGTGA CTGATGCTAA TGTGTTGTGT GGTGATGGAG GCAGCTGTGG CAAGGATGGT      120
GACTTTGGTG GAGAAGGTGG CCATGTTGGG GCTAGTGGCT GTGGTTGTGG TGATGGCCAT      180
GGTGAGGATG GTGTTAAAGG TGGCTGTGAT GAAGATGGTG ACTGGGGTAG AAATGGTGAC      240
TGTGATGGTA ATGTTGGCTG TGGTATGAA GGGTAGTTAT GGTGAGGATG ATGACTATGG      300
TGGTGAAGGG GCCATAGTGG CAACGGCACT CGAG              334

```

(2) INFORMATION FOR SEQ ID NO:984:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 631 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:984:

```

GAATTCGGCC TTCATGGCCT AGGGAAGAG TAGGGGTGGA GGGGTAGGAG GATTTACTCT      60
TCCAGCGAGA GCTACGCGCA TCCCATCCTC CCCCTCCCCC CTACCCGGGC TCCGGCNTGG      120
AGGCGGGGCG TGGCCGGCCT GCTTTGGGAG GGGAGGGGCT TCCCTTACAG TGCTGGGCTC      180
TGCCAGGACG GCTGTGGGGT CGCCTTACCT CGGGGTATCC ACTCTGCAGT CGACCAAGTT      240
CCGCCAGGAG CAAAGGGTAG GAAGGAGAGC AGGATCTGCT GTAGGAACGC AGCTACCGCG      300
CCACTATCAC GAAGAAACAG CAGGCTCGGG GCACGAGACG AACTGGAGAC CGCGCTGCCT      360
AGCTGGGTAA CCTGGGAAGC AGAGGGTAAT AAGTGGCGCC TTAAGATAAC CCTGTAGCAG      420
CAGCAGTGGC GGCCAAAGGA GGCTGCTCAG GGAACAAGCG GCTGTAGTAG TCTGTGGGGC      480
GACTGGAGTG ACCGAAGCCA AGGCAGTTTA GTGCCTCTCG TGTCTTATT TTTTAACCTC      540
TGACTATGCA ATTCTGAAAC CTCCCCATT CGGGGGACCA GACAGCCTGA TAGACACCTT      600
CCACTCTCCT TCCTCCGCC GTGGTCTCGA G              631

```

(2) INFORMATION FOR SEQ ID NO:985:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:985:

```

GAATTCGGCC AAAGAGGCCT ACTGCCTCGG TTTCTACCTT TGCCAAATGA GTTGATAGAT      60
TATCGCTTTT TTTCCAGCTG TCATACTCTA GGAGTCTGAA TTGTAAATC AAAGAAGCAT      120
TCCCCAGAAA AGTTTTTGTG AAAAATTGTA TTTACATAAC CTCAGAAATG TGTATTGCTT      180
TAAAAATTAT AAAGTTCATG GAGCATACCA AGCAGCCTGT ATACCATTTC TAAACCAACT      240
ACTCCCCTGC AAGATAGATC TCTTTTAT AGACAGAAAA TAAATTCAAA GAGGTTTGTT      300
ACTTGCCCAA GGCCACCACT CGAG                                         324

```

(2) INFORMATION FOR SEQ ID NO:986:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:986:

```

GAATTCGGCT TTCATGGCCT AAAATGTTTT TCAATTAAAG ACTTAAATAT TACACTTTTA      60
AAACTTTTTA TTATGGAAAT CTAAAAAATA TTCACCAAAT GAGAGAGAAC ATTACAATGA      120
ACCACCACAT ACCCATCACC CATTTTCAAC AATTATCAAC ACATGGCCTA TCTTGTTCCT      180
TCCATACCTT CAGACACCCT CCGTCCACAA ACTGGGTTAT TCTGAAGCAA GCCTTCGAG      239

```

(2) INFORMATION FOR SEQ ID NO:987:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 695 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:987:

```

AAAAGTTCAG GGACTTTGCA CCCTGTGGGG TACTCAGATG TCCAGCCGCA CTCTCTACAT      60
TAATAGTAGG CAACTGGTGT CCCTGCAGTG GGGCCACCAG GAAGTTCGGG CCAACTTTAA      120
CTTTGCTAGT GATGTGTNGG ATCACTGGGG TGACATGGAG AAGCTGGCAA GNGACTCCNA      180
AGCCCACCCC TGTGGTGGGT GAATGGGAAA GGGAAAGAAT TAATGTGGAA TTTAGAGAA      240
CTGAGTGAAG ACAGCCAGCA NGCAGCCAAC TTCCTCTCGG GAGCCTGTGG CTGTCAGCGT      300
GGGGATCGTG TGGCAGTGAT GCTGCCNGA ANGCTGAGT GGTGGCTGGN GATCCTGGGC      360
TGCATTCGAG CAGGTCTCAT CTTTATGCCT GGAACCATCC AGATGAAATC CACAGACATA      420
CTGTATAGGT TGCAGATGTC TAAGGCCAAG GCTATTGTTG CTGGGGATGA AGTCATCCAA      480
GAAGTGGACA CAGTGGCATC TGAATGTCCT TCTCTGAGAA TTAAGCTACT GGTGTCTGAG      540
AAAAGCTGCG ATGGGTGGCT GAAGTTCAAG AACTACTAA ATGAGGCATC CACCACTCAT      600
CACTGTGTGG AGACTGGAAG CCAGGAAGCA TCTGCCATCT ACTTCACTAG TGGGACCAGT      660
GGTCTTCCCA AGATGGCAGA ACATTCCTAC TCGAG                                         695

```

(2) INFORMATION FOR SEQ ID NO:988:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:988:

```

GAATTCGGCC TTCATGGCCT ACTCAGAACA ATCACTGCAT ATCCCATCTT AAAGGCAAAA      60
CCCAAACCAG AAAAACCCTA CTCAGGTCTT GCTGACCCAA CACTACAGTC ACTGTATTTC      120
AGACCCCTTT TTCTTGAAAA AGGGACTTCA CTTTTTTGAG CAGCATTCTA TGGTCTTTTC      180
CACACAGCAA TTGACGCATC TCACGGCACT GCTCTCTGCT GGGCAGAGAG CAAACACAGA      240
CAGCCACCAT CCCCATATTC GTAGTAAGAG AACTCCAGA AACGCAGCCA CCGTCCCCCT      300
AGACCTGCCT CGAG                                     314

```

(2) INFORMATION FOR SEQ ID NO:989:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 687 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:989:

```

GAATTCGGCC AAAGAGGCCT AGGAGCTCCC CCATGGATCA TGGCGTTAAT GTTTACAGGA      60
CATTACTAT TCTTAGCATT ATTGATGTTT GCTTCTCTA CTTTGTAGGA ATCTGTGAGC      120
AATTATTCCG AATGGGCAGT TTTCACAGAT GATATAGATC AGTTTAAAC ACAGAAAGTG      180
CAAGATTTCA GACCCAACCA AAAGCTGAAG AAAAGTATGC TTCATCCAAG TTTATATTTT      240
GATGCTGGAG AAATCCAAGC AATGAGACAA AAGTCTCGTG CAAGCCATTG GCATCTTTTT      300
AGAGCTATCA GAAGTGCAGT GACAGTTATG CTGTCCAACC CAACATACTA CCTACCTCCA      360
CCAAAGCATG CTGATTTTGC TGCCAAGTGG AATGAAATTT ATGGTAACAA TGTCTTGCTC      420
TTAGCATTGT ACTGTTTGTG ATGCCAGAA GACAAAGTTG CCTTTGAATT TGTCTTGGA      480
TATATGGACA GGATGGTTGG CTACAAGAC TGGCTAGTAG AGAATGCACC AGGAGATGAG      540
GTTCCAATTG GCCATTCTTT AACAGTTTTT GCCACTGCCT TTGACTTTTT ATATACTTA      600
TTAGATAATC ATCGAAGACA AAAATACCTG GAAAAAATAT GGGTTATTAC TGAGGAAATG      660
TACGAGTATT CCATGGTCCG TCTCGAG                                     687

```

(2) INFORMATION FOR SEQ ID NO:990:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 677 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:990:

```

GAATTCGGCC AAAGAAGGCC TAGAGCCCTT CTGTCCCTTC TACCATGTGT GGATGCAGTG      60
AGAAGGCACC GTATCTCTGA AGCAGAGAGC CCGCCCTGGA CACTGGATCT GCTGGCACCT      120
TGATCTTGA CTTCCAGCC TCTAGAAGTG TGAGAAATAA TTTTGTGTTG TTTACAAATT      180
ACCCAGGCTA AGGTGTTTCA TTGTAACCTG AATGGACCAA GCTGGTGTGA CCGTGTGGA      240
AAACTGGCAG TATCTACCAA AAGCCGAACA TACGTATAAA CTGATCCAGC AGTTCCACTC      300
CTGGGTATGT ACACCACAGA AAGCTATGTC CACCGAGACA TTGGCAAGAA TGTTCCTAAC      360
CACACGCTGA CTGTAGCCCC AAACCTGAAA CAACCCAAAT GTCCATCCAC CAACCCAAAT      420
GTCCATCCAC AGTTGAAGCT ACAGTGAAGT CACAGGGTCG AATACTACTG CACAGCAACG      480
AATATGAATG AAAATATCGC TATGCACAGC AACATGGATA AATTTCACAG ACATGAGGTC      540
AAGCAAAAGA GGTCAAGATC CTCATCATCA AGAGAGAATT CATTGTATGA TTCTCTTCCT      600
ACAAAAGTA CAGAAATAAG CAAAAGTAT CCATGGTGTG AGAAGCCAGG GGAACAGTTA      660

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ACAAGGGAGC ACTCGAG

677

(2) INFORMATION FOR SEQ ID NO:991:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:991:

```

GAATTCGGCC AAAGAGGCCT AAGAAGCTGC TTCCTCCTGG GAACAACCGC CTCCCGCTCC      60
TAGCAGGTTG CTACTGCCCC GAACCCGCGC TGCAGGGAAC AGCGGGGCAA ACAAACCAA      120
TAGAGCCATG GCGACTCCCT CTGCTGCCTT CGAGGCCCTT ATGAATGGTG TGACAAGCTG      180
GGATGTACCC GAAGATGCTG TTCCATGTGA ACTGCTTCTT ATTGGAGAGG CTTCAITTC      240
TGTGATGGTG AATGACATGG GCCAGGTCCT CATTGCTGCC TCCTCCTATG GCCGTGGCCG      300
CCTGGTGGTC GTGTCCCATG AGGACTACTT GGTGGAAGCC CAGCTCACGC CCTTTCTCCT      360
GAACGCAGTG GGGTGGCTTT GCTCTTCCCC TGGGGCTCCC ATTGGTGTAC ACCCATCCCT      420
GGCACCTTTG GCCAAATCC TCGAG                                         445

```

(2) INFORMATION FOR SEQ ID NO:992:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:992:

```

GAATTCGGCC TTCATGGCCT ACTGTGATT AAAATCTGC TGTGTGGCTT GGGTTGTTTG      60
TGTTGGTTCC AAACCTGAA TCTTTGGGG TCTTCAATTT GTGGGCATGT CAGTGGAAAT      120
TCTAAGCTTT GTTTAATGGT GTGTGTGTGT CTGTCTGTCT CTGTGTGAGT GTGTTTAGAA      180
ATTGCTTCT CTGGGTTCTT CGCTCGTCTT CTGGAAGGTG GGGTTATAGA CATGCTGGTG      240
AATTCTGAAT GTTTTATAAA TTAGACTATT AACGGAGTTA AATTGAAGAA ACCTTCTGTC      300
ATAAGACCTT CCAGGAATTC CATTCCAAAT GAGGAAATGC ATAAAGACTT GTCCACTTGG      360
CAACATTGG GTGTTTGGGA GGTGGACTCG AG                                         392

```

(2) INFORMATION FOR SEQ ID NO:993:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:993:

```

GAATTCGGCC TTCATGGCCT AGGCGGCTCC CTTGGTCTTG GTGCTGGTGG TGGCTGTGAC      60
AGTGCGGGCG GCCTTGTTCC GCTCCAGTCT GGCCGAGTTC ATTTCCGAGC GGGTGGAGGT      120
GGTGTCCCA CTGAGCTCTT GGAAGAGAGT GGTGAAGGC CTTTCACTGT TGGACTTGGG      180
AGTATCTCCG TATTCTGGAG CAGTATTTC TGAAGTCCA TTAATAATAT ACCTCTTCA      240

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TTTCCTAATT GACTATGCTG AATTGGTGT TATGATAACT GATGCACTCA CTGCTATTGC 300
CCTGTATTTT GCAATCCAGG ACTTCAATAA AGTTGTGTTT AAAAAGCAGA AACCTCGAG 359

(2) INFORMATION FOR SEQ ID NO:994:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 115 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:994:

GAATTCGGCC AAAGAGGCCT AGACTGTCAG CTGTGAGTGG CCAGTACAAC AAATGCTTTG 60
GCTTTTCAGTT GTCATTCTGA TGTCTGCAA CATATCATCG TGTTTGATTG TCGAG 115

(2) INFORMATION FOR SEQ ID NO:995:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 633 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:995:

GAATTCGGCC AAAGAGGCCT AGTGGAGACA AAAGCATGTG ATCCCAATTT GCTGGGATAT 60
CCTCTCCTGC ATTTCAAACA CCTTCACTCA GTGTCAGCCA CAGCGGCCAC CACATAGCAG 120
CTGGCCCCGC ACCTTCTCTG GAACAGTCTG GAGATGCAAG GTCAGGGTGG AAGGCCTGGT 180
TCACCCCTGA AAGAAAGGAT GGCTAGGGGT AAACAAGACG AGCAACTCCC TGGAAATGCAG 240
GGAGCCAAGA AGGCGAGCCG AGGATAAGGC TCTGCCTCCC CAACGGCGAG GGTTCCTTTT 300
CCTTCTGGTC ATTANAACG CACAGCCCCC GGGGAGATGT TGAACATGGC AGGGTCGAAT 360
CGCTGGCCTC GGAAGGGAGA ACTTCAGCAT CCCACCCTTC TTCAGCATCT CATGGACTTT 420
CAGCTCATGG CTCTGTGGCT TGCCCTGCAG CTTCTGGTGG TAGTCAAAGG TAAGCCTGTC 480
CAACACCGCC TGTTCCTCCT CATCCACGGT GGCCATGGAG CGCTCCTTGT TGATCTTGTC 540
AATGTCGATG GGCTCTTCTC CCTCCAGGAT GGCCTTCCAC CAATACTCGC CCACCTTGCT 600
CAGGTTCAAC AAAACGCACT TCCCGGGCTC GAG 633

(2) INFORMATION FOR SEQ ID NO:996:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 462 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:996:

GAATTCGGCC AAAGAGGCCT AGTTGATTCT CAGTTCATGG TGGAGTCATT CAAGTTTATT 60
TCTGGCATCT TGGCAGCCCT GAGTGCCATG ATCTCTCTAG AAATTCCGCA AGTCAACATC 120
ATGACAAAAA TGGATCTGCT GAGTAAAAA GCAAAAAAGG AAATTGAGAA ATTTTGTAGAT 180
CCAGACATGT ATTCTTTATT AGAAGATTCT ACAAGTACT TAAGAAGCAA AAAATTCAAG 240
AAACTGACTA AAGCTATATG TGGACTGATT GATGACTACA GCATGGTTCC ATTTTACCT 300

TACGATCAGT CAGATGAAGA AAGCATGAAC ATTGTATTGC AGCATATTGA TTTTGCCATT	360
CAATATGGAG AAGACCTAGA ATTTAAAGAA CCAAAGGAAC GTGAAGATGA GTCTTCTCT	420
ATGTTTGACG AATATTTTCA AGAATGCCAG GATGTACTCG AG	462

(2) INFORMATION FOR SEQ ID NO:997:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:997:

GAATTCGGCC AAAGAGGCCT AGCTGGTAAC ACATGTGAAC TCAGGTAAAG TCATCGAGCA	60
TTTACTGAC TCTATTCCTC AATAAAGTAC TGGGAAAAAA CTCATAAGAA TGACAAAAAC	120
AACATACTCA GGTATGCGAG CAGAAGCCTC TGACACAGCT TGTCTTCGGG GCTTAACTAA	180
ATGATCTATT TTAATGAGGG AATCCGTGGA AAGGCATGCG TTTTCAGGCT CATTTTCTGC	240
TTCGATGCTT TGTCCAGAGA GTTGAATCT CAACGTGTGT TTCATGTGAG GCTCCTTAAG	300
AGGGTGACAT TCAACATCCC AAAACTGGGC ATAATCCCC CTACCTCTGG GCAAAAATGT	360
GATGGAGACT TTTTGGATCC CATGGCTTTC CAGCAGACCA GAAATAGGAG AACATCTGAA	420
TGCTGCATAG GTAGCTCTAA AAACATCTCC ACTTTCATCA ACTCCCTTGA CATAAGGTGG	480
CACCACAGAC GTGAAATGGC ATCTGTCATC TTTAGCGCCA CCTTATGTCA AGGGAGTTGA	540
TTCTCGAG	548

(2) INFORMATION FOR SEQ ID NO:998:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:998:

GAATTCGGCC AAAGAGGCCT AGTTTCCCTT TCTGTATTTT ACTACTAAAT TAGAAAGCAC	60
TGGTTATGTA ATAAGTTACT ACATTGCTTT GGTGAGTAA AAACAAGAGT ATATATTTTT	120
CTTGTTTCTT ATTTNCTAAA CCCTTAACTC CTGCTGAGGT CATAACAACC TCAGTCTAAG	180
CTCTGTGTCC ATCATACTGT TAACTTAAAC AAATGGGTGG TGGGGGTGGG AAGGGTAATA	240
CAGTCCTGCC ATTGCCTACC AGTAGGAGAG TCCAAACAGA ACACCTTTT GAGTAGCAAT	300
TATTTAATTT GCCCAGTCAA GGCACCGTGT TTATATACTA TTTACATTG AATTTGATTA	360
TGCCCTACAG ACCTGGCTGG TCAAGGATT GATATACACA TATTGGCTTG GGATTCGAGC	420
TTTCTTTTTT ATTTAAATAA AAATTATAT ATATATTATA TATATACATA TATACATAGC	480
TATATCTGTA TATATATTGG GTATGTTTTA AGGATTTTTT CGCATGAGCG CAGCTGTTGC	540
GATAAATTGA CCGATTGGGA GGTATTCTCG AG	572

(2) INFORMATION FOR SEQ ID NO:999:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 629 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:999:

GAATTCGGCC	AAAGAGGCCT	AGAGGGGAGC	ACGTCTTTTC	CTTGAGTGTA	ATTCACTAAT	60
GACTGTGGTT	CCAAGGAGGT	GCGACCTTTA	AAGGGAATTG	GCCCTTCTTT	GAAGGCAGGT	120
GAGAATCTAG	TCTCAGTGAC	AACCCAGCCT	GATTTGGAAG	GGGGGAGTCA	TAAGGGTTTT	180
CGCCCAGCAC	ACCAGGGTTG	CAGCCTGCGC	AAGACCTTCC	ATAGCTATTT	CTGCCGGCTT	240
GCTTCCTTCC	CTTCCAGCC	ACGATGAGGC	AGCTGAGGGT	TGCCACGGAA	ACCGGCTCTG	300
TCCTCCCACT	GGAGGCTGCC	AGCTCTGATT	TCCTGCAGAG	TTAAGAAGGA	GGCGGCAGTG	360
GGGGTCACCC	AGGCGTGAAG	ATGGGTTTCC	CTGGGGATAT	CCTGCCTCCT	GCCAAATCACA	420
GCGTCTCTCT	GGGAATCCTG	GGGGTGCTTG	GAGGCTGAGG	CCCAGGGAAG	CCCCCAAACC	480
CCAGTGTCTG	TCTGAGAAGA	GACTAGCCTC	TGGGACATTC	AGAGGTCTGG	GGTCTTTTAA	540
TCTCCCTCCA	GCTAAAGCTA	GAGGGACCTC	ATTATGTGTC	TTACAAGATG	TACCCTAAAC	600
CGTCGATTGA	ATTCTAGACC	CGCCTCGAG				629

(2) INFORMATION FOR SEQ ID NO:1000:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 568 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1000:

GAATTCGGCC	AAAGAGGCCT	ACCTGTATGC	TATTAACACT	CACCACAGCA	GAGAGCTGAG	60
GATTGTGGTT	GCAATTCGGA	ATAAACTGCT	TCTGATCACA	AGAAAACACA	ACAAGCCAAG	120
CGGGGTCACC	AGCACCTCAT	TGTTATCTCC	CCTGTCTGAG	TCACCTGTTG	AAGAATTCCA	180
GTACATCAGG	GAGATCTGTC	TGTCTGACTC	TCCCATGGTG	ANGACCTTAG	TGGATGGGCC	240
AGCTGAAGAG	AGTGACAATC	TCATCTGTGT	GGCTTATCGA	CACCAATTTG	ATGTGGTGAA	300
TGAGAGCACA	GGAGAAGCCT	TCAGGCTGCA	CCAGTGAGAG	GCCAACAGGG	TTAATTTTGT	360
TGCAGCTATT	GATGTGTACG	AAGATGGAGA	AGCTGGTTTG	CTGTTGTGTT	ACAACCTACAG	420
TTGCATCTAT	AAAAAGGTTT	GCCCCTTTAA	TGGTGGCTCT	TTTTTGTTTC	AACCTTCTGC	480
GTCAGATTTC	CAGTTCTGTT	GGAACCAGGC	TCCCTATGCA	ATTGTCTGTG	CTTTCCCGTA	540
TCTCCTGGCC	TTCAACACCG	AACCTCGAG				568

(2) INFORMATION FOR SEQ ID NO:1001:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 543 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1001:

GAATTCGGCC	AAAGAGGCCT	AGTAATACTT	AAAGTGCAAT	TGTTCCAAGG	CTTTTGTTTC	60
CATCATCACA	AATATTATAA	AGAAAGAGCT	ATGTTTAGGG	TGAAGAAGAT	ATGGCACAAG	120
TAATATGTAA	AGAACTTATG	ACTTTCGCAT	CCTCTAGCAA	ACAGTAAGCT	GCCTGTACAG	180
CTGCACACAG	ACGGACTTTA	CACAACAAAC	TCTGGAACCT	CATCATGAGT	GAGATCCAGA	240
GAAAAGTATT	TGCTGGTTCT	TTTGACTGGA	AAAGCATCTT	GGATGTTGAT	GCACTGCTGG	300
GCCAAGCAAC	TGTTTGCAATA	GAGGCCCTCC	TCATCCAGTT	CATGGCCACA	TCCAAAGGTG	360
TAACCTCTGAG	CAGTGTCCCTG	ACACAGACCT	GCAATGCGCA	GGAAGTCTTT	CTGGTAAAGT	420
CTGATGTCTAT	CGAGGCTCAA	GCTGTGTGCA	TCAGTGGAGG	TCTTTGGTTT	CCGACATATA	480
GTCTGTGGAA	GAGAATCAGT	ACTCTGGCCA	CGAAGCTTAA	CAACTGTTTC	TGAAGAGCTC	540
GAG						543

(2) INFORMATION FOR SEQ ID NO:1002:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1002:

```

GAATTCGGCC AAAGAGGCCT AATCCACTT ACGAATTAAC ACTGTGTACA TGGCACCTTT      60
GGGCCCATCT TGCCTTGAAA GTCCTGTGTG GATGGAACAG TGGCATTTC CTTCCTTTTC      120
TCAGGACTGC AACAGACCT AATATTGGC CTGCCCCTTG CCTGGGAAGC TGCTGCTGAG      180
TCTTGCTCA GCCGGGCTGT GCATTCCGAG CGGCTGCCCT GCCCTGCGCT CAGCAGCTGG      240
AATCAATCTG CCCACCTCCT TAAGAAGCCA CTTATCAGC GGTCAACCCG CAGCTGCTCG      300
CCTCCCAGGG CTGCCGGGCT AGGGCTTTAT CGCATTTTTG AAAATTTCAGA TTTCTGTGTC      360
TGGGCTATGC CCCTCGAACA GTAACAGCAC CGCTTTGCAG CAGGGAGGAG ATTTACCAG      420
GATATGGAGG GGACAGGAGA AAAGCCCTCC TTCCCAGAGT CCACTGTGTC TCAGGATTG      480
CTCTCAAAGA GGCAAGAAAT CTCTAAGAAT GAAAGGAGGT GTTTTGTGTT GTTGTGTTGT      540
TTTTGTATGT ACTGGGAGGA AATGGCTAAT CTGGGTATG CACACGCTCG AG              592

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(2) INFORMATION FOR SEQ ID NO:1003:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1003:

```

GAATTCGGCC AAAGAGGCCT AGGCTCCGTC TGTGGGGGG CGAACACGCC GCGGTCTCTG      60
TCGTGTGAAG TAAGAACTCT GCTAGAGAGG AAATGGCTGC TTCATCATCA TCCTCCTCAG      120
CTGGTGGGGT CAGTGGAAGT TCTGTCACTG GATCTGTTT CAGTGTCTCA GACCTTGCCC      180
CACCACGGAA AGCCCTTTTC ACCTACCCCA AAGGAGCTGG AGAGATGTTA GAAGATGGCT      240
CTGAGAGATC NTCTGCGAAT CTGTTTTTAG CTATCAAGTG GCATCCACGC TTAAACAGGT      300
GAAACATGAT CAGCAAGTTG CTCGGATGGA AAAACTAGCT GGTTTGGTAG AAGAGCTGGA      360
GGCTGACGAG TGGCGGTTTA AGCCCATCGA GCAGCTGCTG GGATTCAACC CCTCTTCAGG      420
TTGATACTGC CTGGATGGTC ACCTCTGGTG CGCAGCAAGT GCAAAGCCAG TGGGGGACTT      480
TCTCAGAGCT TACATAGCCA TCCAGAGATC CACAGCTACG TCACTGAATT GTTAATGCAC      540
ATTTGTACTT GGTCTCTCTG TATCTATTCA CAGGCGAACT CGAG              584

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(2) INFORMATION FOR SEQ ID NO:1004:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 440 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1004:

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GAATTCGGCC TTCATGGCCT ACTTTCTCAT TCCCTAAGTC ATTAGAAAGC ACCAGTTCTA      60

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ACTCCAAATG ATGACATGGT CTTATTTTAT CTATTAACCA TAAGCTTACA GATTCTAGTG      120
AAGAAAAAAC TTTAGGAGGC TACATGGTCT ATTGGAGAGT GTAGGCTCTG CAGTCAGAAG      180
ATCCCTACCC AGGCTTCTGT CTTTCTCAGT AAGACTTGGG ACCACAGCAA GGTCCGCAAT      240
CTCCTGAGGC TCTGTTTTCT ATGGTTGGGA TAACATGGTA AGTTATTTTC TTCTAAGTAG      300
TCACACATGG AAATCTTATC TAAAATTTTA TACCATTAAAC TTTTATTTCA CTTATTAACT      360
CATACCATTA ATACTTTACT TTAGCTATGT TTGGTATGCA TGAGTTGATG AGTGATTAGA      420
GTACTATGAG CGATCTCGAG                                     440

```

(2) INFORMATION FOR SEQ ID NO:1005:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1005:

```

GAATTCGGCC TTCATGGCCT ACTCAGTTGC AGATTCTGGC CAACATGGAC AGCCAGCTAA      60
AAGAGCTACA GAGTCAGCAT ACCCATGTG CCCAGGACCT GGCTATGAAG GATGAGTTAC      120
TCTGCCAGCT TACCCAGAGC AATGAGGAGC AGGCTGCTCA ATGGCAAAAG GAAGAGATGG      180
CACTAAAACA CATGCAGGCA GAACTGCAGC AGCAACAAGC TGTCTGGGCC AAAGAGGTGC      240
GGGACCTGAA AGAGACCTTG GAGTTTGAG ACCAGGAGAA TCAGGTGCT CACCTGGAGC      300
TGGGTCAGGT TGAGTGTCAA TTGAAAACCA CACTGGAAGT GCTCCGGGAG CGCAGCTTGC      360
AGTGTGAGAA CCTCAAGGAC ACTGTAGAGA ACCTAACGGC TAAACTGGCC AGCACCATAG      420
CTCGAG                                     426

```

(2) INFORMATION FOR SEQ ID NO:1006:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1006:

```

GAATTCGGCC TTCATGGCCT AGAGTAGCCA GGGAGCTGGA AGTTCCACAG ATTGGTTTTA      60
ATAAACAAAC TCCCTCAATG ATGAGTGGTC TTTTGAAGAG CATGGTTAGA ACTTGGGATT      120
GTGCTTCTCA TGA CTACAAA TGTACTTGTA GCTTAGGTGC AAAAGGGTAG GTCAGTGGGT      180
AGCTAACTAC TGAGGATTGA TTTTCTGAC GCTGGTGT TT AAGTGTCA CC CAGAACTGGC      240
ATATAAAGTG GCTCATTAC CCAAGTATCT TCCTTTCCTT TTTACAAAAT CCTTGGCTGT      300
TGTGGGGCCT ACATCTCTTC ATGATTATTA TTGCATCTGG TGTCATGTTT TTCCAGCTGG      360
TGTACTGCTT CCCTGTAGGC TTCTTGATGT TCACTCCTCG AG                                     402

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(2) INFORMATION FOR SEQ ID NO:1007:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1007:

GAATTCGGCC	TTCATGGCCT	ACTGGTGCCA	CGGGAGGCAG	ACACCAAGTT	CTGGGGTCTC	60
CAGCTGCAGT	GGGTGGCCGC	CAATTGCTTC	TCTCTGTCCA	GACTAATGAG	AACATGGAGA	120
TCACCAGTGC	ACTGCAGTTG	GAATAGCACG	TAAAGAGGGA	GCTGGGAAAG	AAGCTGGGCA	180
AGCTAAAGGA	CATGGTAACC	CTGCCCCATC	CAAGAAGAGC	TGGAAGGCCG	GCACCAAGCT	240
CTGGGGAGGG	GAGGTGTGAA	GCCAGAGGCA	GCTCCAGCCT	GGGGGACAGG	TGACCCACAGC	300
ACCCTCCAGG	GCAGTCCTGT	GACTGTTTCT	TGCTTCCCGC	CCTCTGACAT	TTAGTGGTGG	360
GTTTCGTTCT	CCTAGGTCTG	GACATCATCA	TCCCAGCTGG	AGTCATGGAG	CCTCCCAAAC	420
ATAGGGAAG	AGATGGTGGT	ATAAGAGGCT	CTCGAG			456

(2) INFORMATION FOR SEQ ID NO:1008:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 564 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1008:

GAATTCGGCC	AAAGAGGCCT	AGGATGGCTG	TGTTTGACGG	GTGTTGCTCG	TGACAGTTGG	60
GGTCCTCTC	AGCATCAGTC	TTGACATGGC	TGCAACTGGG	GGGGTCCTCG	GGATCCTCCC	120
GGAACTCTT	CCTCAGCATT	CGCTCATGAT	AAGGTTTCAG	GTGTCTTGAT	GGTTCAGTCC	180
TGGAGAAACA	TAAGCATAAC	CTCTACCCCA	AGTTATTATT	TTACCTATTT	CCCAACTTTC	240
TGTTATCAGG	TCTCTCCACC	AAACCAAGTTG	TTCTGCTTCT	GTCTTTGTCAG	CTGGTTTCTG	300
TAGATGCTGT	TCAGCTGCTG	ATAAGATCCG	GCCTTTAGGC	AGGCTCAAAA	AATTAAAGT	360
TAATAATGCG	ATTCAATTGC	TTATGGGGTG	TCCTGTAGTA	CCTGTTTTCC	CCCTTTTGCT	420
TCTGCAACTG	CTGTTTCAGG	GAGAGATTCA	TTCTTTCCAC	TATGGCNTGT	CCTTCAGAAAT	480
TATATGGGAT	ATCAGTAATG	TGTTTAATAT	TCCGTATAGA	GAAAAATTTA	GCTAGAGCTT	540
GAGAATTAGG	TTCCAATCCT	CGAG				564

(2) INFORMATION FOR SEQ ID NO:1009:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 661 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1009:

GAATTCGGCC	AAAGAGGCCT	AGAAAAAGAT	GTCATTCCGT	AAAGTAAACA	TCATCATCTT	60
GGTCCTGGCT	GTTGCTCTCT	TCTTACTGGT	TTTGCACCAT	AACTTCCTCA	GCTTGAGCAG	120
TTTGTTAAGG	AATGAGGTTA	CAGATTTCAGG	AATTGTAGGG	CCTCAACCTA	TAGACTTTGT	180
CCCAAATGCT	CTCCGACATG	CAGTAGATGG	GAGACAAGAG	GAGATTCTCTG	TGGTCATCGC	240
TGCATCTGAA	GACAGGCTTG	GGGGGGCCAT	TGCAGCTATA	AACAGCATTG	AGCACAACAC	300
TCGCTCCAAT	GTGATTTTCT	ACATTGTTAC	TCTCAACAAT	ACAGCAGACC	ATCTCCGGTG	360
CTGGCTCAAC	AGTGATTCCC	TGAAAAGCAT	CAGATACAAA	ATTGTCAATT	TTGACCCCTAA	420
ACTTTTGGA	GGAAAAGTAA	AGGAGGATCC	TGACCAGGGG	GAATCCATGA	AACCTTTAAC	480
CTTTGCAAGG	TTCTACTTGC	CAATTCTGGT	TCCCAGCGCA	AAGAAGGCCA	TATACATGGA	540
TGATGATGTA	ATTGTGCAAG	GTGATATTCT	TGCCCTTTAC	AATACAGCAC	TGAAGCCAGG	600
ACATGCAGCT	GCATTTTCAG	AAGATTGTGA	TTCAGCCTCT	ACTAAAGTTG	TCGATCTCGA	660
G						661

(2) INFORMATION FOR SEQ ID NO:1010:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1010:

```

GAATTCGGCC TTCATGGCCT AGGAAAGATT TGA CTGCTTC TCTCATGCAG GGGAAATAAG      60
CAAAGGCACG TGCAGAGGGA AGTAGGGGTA GAGAGAGGCA AGTTAGCTTC AGAGAGATTT      120
ATTTCACCCC AGTTCTGTTC TACTCAGCCT GACGTTTAT CATCTTTTG AAAAGTGGCG      180
TGAAGTGGTG TGGAAACACAT CAGAGGGTGA AGCCGAGCAA ATCTGAAAGA GAGCAGAGGA      240
TTTCATATGA TATCCTATGT GTGCTTTCCC CTCCTTCTT AGGAGCTGGA AGAGGCAGAA      300
TTGATGTCCA CTCGAG                                     316

```

(2) INFORMATION FOR SEQ ID NO:1011:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1011:

```

GAATTCGGCC TTCATGGCCT AGAAACATGC TAGACATTTT GAAGAACCAG CAAGAATGTT      60
AGTGTAGCCA ACAGTGAGGC AGGCAAAGGT GAGTAAGGTA GATTAGTTCA GGGAAAGAAAA      120
CATAACATTA TTTAATCCAT TGTGGGCCAC ATTGCACAT GATAACACTA TCATGTCATA      180
GAGTCTCACC ATTGTTTAAG ATGTTTAAAT TTTTAATAC GAATATATTC TCACACCCCT      240
CGAG                                     244

```

(2) INFORMATION FOR SEQ ID NO:1012:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1012:

```

GAATTCGGCC TTCATGGCCT AGCACTTCCC GAGACTCTCT AGCCTTGGAT AAAGAGAGAA      60
TGGATAAAGA TCTGGGATCT GTGCAGGGAT TTGAAGATAC AAATAAATCC GAGAGAACTG      120
AGAGTCTGGA AGGAGATGAC GAGTCCAAGT TAGATGATGC ACATTCATTA GGCTCTGGTG      180
CTGGAGAAGG ATACGAGCCA ATCAGTGATG ACGAACTAGA TGAAATTCTG GCAGGTGATG      240
CAGAAAAGAG GGAGGACCAA CAGGATGAGG AGAAGATGCC AGATCCCTTA GATGTGATAG      300
ATGTGGATTG GTCTGGTCTT ATGCCAAAGC ATCCAAAAGA ACAACGAGGC TCGAG      355

```

(2) INFORMATION FOR SEQ ID NO:1013:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1013:

GAATTCGGCC	TTCATGGCCT	ACAGCCTAAA	TGTTTTATTT	CCTGAGAGGC	TGGAATCTGT	60
ATTTGTGGTA	TCAATCAGTC	AACTGAAAT	TATTAAATGC	CTGCTGTGAG	CAAGGCCTAA	120
TGCTGAGGGA	TGTAAAGAAG	AGTGAGAAGC	TAGTCTGGTT	GGGGTNATAT	GACATGGCAA	180
GT CATAGAA	T GAAGAAGC	ATTCTTGTC	ATATGAAAGC	TGCAGATTAG	TGTGGTTCTA	240
AGTAGAGGCC	AGGGTCACTG	GAGTCTAGGA	TTGCAGGGTT	GGCTGGCTTC	CCAGAGGCTA	300
AGAATTTAAT	TTGATCTTG	AAGATCTGGT	CCAATTCCTA	CANGACTCGA	G	351

(2) INFORMATION FOR SEQ ID NO:1014:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 393 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1014:

GAATTCGGCC	TTCATGGCCT	AGGCCTTGTA	TTTTTCTTA	TTTCTGCTA	AATTAGAAAG	60
AAATTGCTG	TTTCAAATAT	ACTCAAGCTG	TTCAAGTCTT	CAACAAAAG	TAGGTGACTG	120
AAACTGTAT	GTTTAACTAT	GCTTAAGTTA	ATATTTATAG	TAATGATAGA	AGCCATTTTA	180
TTGGCAATAT	ATCACTTCCT	GATTTCCACA	CCAGGCATTC	CCACATGCAC	AAACAGGTGT	240
GTGGGAGGAA	GGGAAATGGG	CAAAAATGAT	TTCTTCAAG	AGGCTACTGA	GAATGAAAAC	300
TCAAAATCTG	CACAAATAGG	GGTGGTGGAA	GGAGAGAAAG	AAAACCTCAT	GCCAGAAATA	360
ACATGCTTAG	CAGAGAGAGA	GAGAGATCTC	GAG			393

(2) INFORMATION FOR SEQ ID NO:1015:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 262 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1015:

GAATTCGGCC	TTCATGGCCT	AACTCAGTTG	GCTTCTAATT	TGCGTAACAA	GATTAAGGTA	60
GTATTTTGT	ACTATTATTG	GAAGCATGCC	TTCCCTTTT	CACATTATTA	AATTGTATTT	120
ATATTTGTGC	AATTTTAAAC	TATGTTTCA	AATAAACTTT	GTCTGCGGCT	TCGAGGTCTT	180
TTCAAGGATC	TTTCAAATG	GGATTGGGG	ATCAGAACTC	CTTCTGATCA	AATGGAATCC	240
AATTTGTACT	ACTGGTCTCG	AG				262

(2) INFORMATION FOR SEQ ID NO:1016:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 304 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1016:

CAGAATGGGA	CTCCAAGCCT	GNCTCCTAGG	GCTCTTTGCC	CTCATCCTCT	CTGGCAAATG	60
CAGTTACAGC	CCGGAGCCCG	ACCAGCGGAG	GACGCTGCCC	CCAGGCTGGG	TGTCCCTGGG	120
CCGTGCGGAC	CCTGAGGAAG	AGCTGAGTCT	CACCTTTGCC	CTGAGACAGC	AGAATGTGGA	180
AAGACTCTCG	GAGCTGGTGC	AGGCTGTGTC	GGATCCCAGC	TCTCCTCAAT	ACGGAAAATA	240
CCTGACCCTA	GAGAATGTGG	CTGATCTGGT	GAGGCCATCC	CCACTGACCC	TCCACACGCT	300
CGAG						354

(2) INFORMATION FOR SEQ ID NO:1017:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1017:

GAATTCGGCC	AAAGAGGCCT	AGTTTAAAGA	AAAAAAAAAA	GACCCATCAA	GGGCATAGAA	60
AAGCTTAGGT	GAAGAAACCC	TAAATGAAT	CCTCATTAT	CAACTCATT	ATTATTTGAT	120
TCATTTGTTT	ATTCATTGT	TCACTCAAGA	AGTATTTGTT	GCCAGACACA	GTACCAACAA	180
AGAAAATAAG	CATCCACTAC	GGCTTTGCAG	AGCTTGGTAC	GCAATGCCTG	GTTTCAAGGA	240
GATATTTGTT	CATCGCTTGC	TTTTAACTGT	ATCACAGCCT	AGGGTGGCAT	GCAGAGGTTT	300
GAATAAGTGC	TGAAACAGGA	CAAGTGAGGT	GCTTATGGAA	ACACACAGGC	TCGAG	355

(2) INFORMATION FOR SEQ ID NO:1018:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1018:

GAATTCGGCC	AAAGAGGCCT	AGAAGGAAAT	TGTCCCGAAT	CCCTGCAGTC	TTTCTGTAGG	60
TTGCGGCACA	ACGCCAGGCA	AAAGAAGAGG	AAGGAATTTA	ATCCTAATCG	GTGGAGGTCG	120
ATTGAGGGT	CTGCTGTAGC	AGGTGGCTCC	GCTTGAAGCG	AGGGAGGAAG	TTTCTCCGA	180
TCAGTAGAGA	TTGGAAAGAT	TGTTGGGAGT	GGCACACCAC	TAGGGAAAAG	AAGAAGGGGC	240
GAACTGCTTG	TCTTGAGGAG	GTCAACCCCC	AGAATCAGCT	CTTGTGGCCT	TGAAGTGGCT	300
GAAGACGATC	ACCCTCCACA	GGCTTGAGCC	CAGTCCCACA	GCCTTCCTCC	CCCAGCCTGA	360
GTGACTACTC	TATTCCTTGG	TCCCTGCTAT	TGTCGGGGAC	GATTGCATGG	GCTACGCCAG	420
GAAAGTAGGC	TGGGTGACCG	CAGGCCTGGT	GATTGGGGCT	GGCGCCTGCT	ATTGCATTTA	480
TAGACTGACT	AGGGGGCTCG	AG				502

(2) INFORMATION FOR SEQ ID NO:1019:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1019:

```

GAATTCGGCC AAAGAGGCCT AATCAAATAG TAAAGGCTGT TCTGGCTTTT TATCTTCTTA    60
GTCATCTCTA AATAAGTAGT ACACTTGGAT GCAGTGCGTC TGAAGTGCTA ATCAGTTGTA    120
ACAATAGCAC AAATCGAACT TAGGATTGTG TTCTTCTCTT CTGTGTTTCG ATTTTGTATC    180
AATCTTTTAA TTTTGAAGC CTATAATACA GTTTTCTATT CTGGGAGATA AAAATTAAAT    240
GGATCACTGA TATTTTAGTC ATTCTGCTTC TCATCTAAAT ATTTCCATAT TCTGTATTAG    300
GAGAAAATTA CCTCCCAGC ACCAGCCCCC CTCTCAAACC CCCAACCCAA AACCAAGCAT    360
TTTGGAATGA GTCTCCTTTA GTTTCAGAGT GTGGATTGTA TAACCCATAT ACTCTTCGAT    420
GTACTTGTTT GGTTTGGTAT TAATTTGACT GTGCACGATC TCGAG                      465

```

(2) INFORMATION FOR SEQ ID NO:1020:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1020:

```

GAATTCGGCC TTCATGGCCT AGGATTTCGT ATGCAAGCTC TTGTTTCTCA GGCTGCCTGC    60
AGAAGAAGTC GCTATAAATT ATCTGTTGTC TACATGGTAC AAGGCCCATT GACTCATCTG    120
ATGCTTGTTT TGTTAATTTC TTAAATATTT TTATCACGGG GCAGTGGGAG GGCTTGGGCT    180
TTTAGCCACA GCTGTTTTAA GACTTCTGAT CTCTGCGCCT GCAGGAATAG GTGGCAACTC    240
GAG                                                                243

```

(2) INFORMATION FOR SEQ ID NO:1021:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1021:

```

CTCCACCGAG AGCCTGGACA GTATGAAGGC TCTGACAGCC GCCATCGAAG CTGCAAACGC    60
CCAGATCCAT GGCCCTGCCA GTCAACACAT GGGCAATAAC ACTGCCACCG TCACCACCAC    120
GACTACCATA GCCACCGTCA CCACGGAGGA CAGGAAGAAG GACCACTTTA AGAAAAATCG    180
ATGCCTGTCT ATCGGGATAC AGGTGGATGA TGCTGAAGAA CCTGACAAA A CAGGGGAGAA    240
TAAAGCACCC AGTAAGTTCC AGTCCGTGGG AGTGCAAGTA GAAGAAGAGA AGTGCTTCCG    300
CAGGTTCACT CGATCCAACA GTGTGACGAC AGCAGTACAG GCCGACCTGG ACTTCCATGA    360
TAATCTGGAA AATTCTCTGG AATCTATAGA GGACAATTCG TGTCTGGGCC CCATGGCCAG    420
ACAGTTCTCC CGCGATCTCG AG                                                                442

```

(2) INFORMATION FOR SEQ ID NO:1022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1022:

```
GAATTCGGCC TTCATGGCCT AGATGATCAG GTTTTCTGG ATGGAAATGA GGTGTATGTA    60
TGGATCTATG ACCCAGTCA CTTTAAACA TTTGTCATGG GATTAATTCT TGTGATTGCA    120
GTAATAGCGG CCACCTCTT CCCCTTTGG CCAGCAGAAA TGAGAGTAGG TGTATTATAC    180
CTCAGTGTGG GTGCAGGCTG TTTGTAGCC AGTATTCTTC TCCTTGCTGT TGCTCGATGC    240
ATTCTATTC TCATCATTTG GCTCATAACT CGAG                                274
```

(2) INFORMATION FOR SEQ ID NO:1023:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1023:

```
GAATTCGGCC TTCATGGCCT ACTTTCCAG AAACCAAGAG TGGCTCTACT GTGGCTATAT    60
TATTATTGTT ATTATTATTA TTTTGGAGAT GGGGTCTCAC TTTGTCATCC AGGCTGGAGA    120
GCAGTGGCAC CATCATAGCT CACTACAGCC CCAAAGTCT GTGCTCAAGG GATCCTCCTG    180
TCTCAGCCTT CTCGAG                                196
```

(2) INFORMATION FOR SEQ ID NO:1024:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1024:

```
GAATTCGGCC TTCATGGCCT AATCATTTAT ATAAAGTTTA AAAACATTTC AGAACTGAAC    60
TATATATTTT TAGAAATATC TGCATATGCC ACATAAATTT TTAAATCAT AAGAATGCTA    120
AACAGCACAT TCAGGACAGG GTGAAGAAAC AGGCATGCAG GTTGTGCAGT AGGAAGCTGG    180
GTAACATTGT TCCTTATGGC TTTGTTGTCG CTTCCAGAAT TTCATTAAAA ACTTTTAA    240
AAACATGGGC CCACATTATG AATTACGTCT GCTTTTAGAG TACTAAAAAC TCCAAGCAA    300
AACACATGAG CCACCGGGCA CGCCTGGCCT TTATTTIATT TTTCTACGTT ATTATTCCTG    360
TTTTCAGAGG AGGGAATTGT CAGGGAATC TCGAG                                395
```

(2) INFORMATION FOR SEQ ID NO:1025:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1025:


```

GGAGAGCTCT GGGCCAGCCC TTCTCTCTCT CTCTCTCTCT CTCTCTCTCT CTCTCTCTCT    60
CTCTCTCTCT CTCTCTCTCT CTCTCTCTCT CTCTGTGTGT GTATATATAT ATATATANAC    120
TTTTCCCTTC TGGATGCAAT AGAGCTATTT TTTTCTCTTT GGAATTGAGT GACACCACCA    180
AGATACGTTT TTGGGTTGAA TATGTGTGTT TTTCAAAATT CAGTCTGGCC TTTTGTGTTG    240
TTGTTGTGTG TGTTCCTTTT AGATGGAGTT TCACTCTTGT TGCCCAGTCT GGAGTGCAAT    300
GGCACTATCT CTACTCACTG CTACCTCCGC CTCCCAGGTT CAAGCAATTC TCCTGCCTCA    360
GCCTCCCAAG TAGCTGGGAT TATAGGCATG TGCCACCATG CCCAGGCAGT TTTTGTATTT    420
AGTCTCGAG                                         429

```

(2) INFORMATION FOR SEQ ID NO:1026:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1026:

```

GAATTCGGCC TTCATGGCCT AGAGAACTGG AGCCAGCTGT CAACTGCCCC CGCCCCACCC    60
AGGCCATTTC GCTTCTGCTA CCGGCATGCT GCTCAGGCT CTGCCCCAAG ACAACGACGA    120
GCCCCCTGTG TCCTCTCCTG GGTCACTTTC CATGACCTG AGGCAGCGAA GACAAGCTCG    180
GCAGCTCCCT GAGCTGCTTC ACACCAACTA CCTATGAGTC TGAGGCCAGC ATCCAGGCGC    240
TGCCCAGACC CTGAGAGTCC CTGGACCATG ACGTAGCCTG TGTGTGAAGG GAGCAAGACA    300
GCCTTGACAG AAGCACAGAG AACGCCACTG GGATTCTTAA AGACGCGAAG GGAAAAAGCA    360
CAGAAGATGC TGGCGTGCA TCTCTCCAG CACCGAGAGG CCTCGAG                                         407

```

(2) INFORMATION FOR SEQ ID NO:1027:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1027:

```

GAATTCGGCC TTCATGGCCT AAATTAATAT CCTATTTTT GCAGATTAGG AACTAAGAC    60
GTA CTGAGGC TGGGTGCCTG GTTCAAGATC ATATAGCTAA CATTATTGGA CATGCAAATC    120
AAGCCCAGAT TTGTGACTCT GAGCTGATGT TAATTCTGTC ACAATATTGG TTCTCAAGAT    180
AAATCTTTCC AGGTGAGGGG GAAAGGGAAT AAATATCTAG AAGTCCCCCT AAACAGAAGT    240
AATTAATTCG TTTCAGAGAA TTGGCAAAAT TTGGGGTTCC CTTCTTAAAA GTTTCCTTCT    300
GTA CTGGA AAAAATTAA AATATGTGCA TTAGGTTGAC AAAGATCAAA AAAGTTAAAA    360
AAAAACCCTT TTGGAATGC TGTGGAGAAA GTAGCACTCG AG                                         402

```

(2) INFORMATION FOR SEQ ID NO:1028:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1028:

```

GAATTCGGCC TTCATGGCCT AAGGGGCTGA AATTAAGAAT GTGGCTTTT TATCCTTTCA      60
AAAATAGATT ATTTGGCTGG ATGTGGTGGC TCACGCCTGT AATCCTAGCA TTTTGGGAGG      120
CTGAGGCAGG CAGATCACCT GAGGTAAGGA GTTCAAGACA AGCATGTCCT GGTGAAACCC      180
CATCTCTACT AAAAATACAA AAAATTAGCC AGGTGTGGTG GCAGGTTTCT GTAGTCCCAG      240
CTACATGGGA GGCTGAGGCA GGAGACTCAC TTGAACCCGG AGTGTCTCGA GGCAGGTCTA      300
GAATTCAATT AGGCCATGAA

```

(2) INFORMATION FOR SEQ ID NO:1029:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1029:

```

GCAGATTTTC GCTCTCATCC CATATCTATT GAGAATGCTG TAGTTGAGGG TTGTTAGAAA      60
CCTGCATTTT ATTAATAATCC CTCCAGGTGA TTCTGATGCA GGCTAGTTCA GTAAACAATA      120
TCAACTAGTT TTCATAAAGA AAACCTCTGG AGGGCCCATTA GTGCCTGCAC TCCAGGTCTC      180
AAAGTATACT TTGAGATCTA GGTATCTGCG CAAGGTGCTA TCCTGAAAGG ACTCTAAATG      240
AGACAACCTG AG

```

(2) INFORMATION FOR SEQ ID NO:1030:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1030:

```

GAATTCGGCC TTCATGGCCT ACCTTATGGC CTAATTAAAT ATTAGTAATA GGTATTCGAT      60
TTGTTTTTAA ATGATTTCTT GTAATAGACT ATTGGGTCAG CTAATACTTT TTTGCATCTT      120
CATATTTTAT GTCATGTTAA TGATAAAATT TCTGACTTTG ATTTGTATGT TTTTGCCCTT      180
TATCCTCTTA GGTGGCCTTG GGGGACTTGC AGGTCTGAGT AGCTTGGGTT TGAATACTAC      240
CAACTTCTCT GAACTACAGA GTCAGATGCA GCATCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1031:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1031:

```

GAATTCGGCC TTCATGGCCT AGAGCAAGTG GTTTTTAAAT ATCTTCGAGC TGAACCTGAG      60
GACCATTATT TTTTAATGAC AGAACCTCCA CTCAATACAC CAGAAAACAG AGAGTATCTT      120
GCAGAAATTA TGTTTGAATC ATTTAACGTA CCAGGACTCT ACATTGCAGT TCAGGCAGTG      180

```

CTGGCCTTGG CGGCATCTTG GACATCTCGA CAAGTGGGTG AACGTACGTT AACGGGGATA 240
 GTCATTGACA GCGGAGATGG AGTCACCCAT GTTATCCCAG TGGCTCTCGA G 291

(2) INFORMATION FOR SEQ ID NO:1032:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1032:

TAAAAATAATT TAACTTTTTT ATTACATTAA AAAACAGGAC TCTGGGAATT GTCACTTTAT 60
 GATCAGCCTT ATATTTTTTC CAGACTGTGT CATTGTGTAT GCCTGTGCCA CCCAACGGAT 120
 GAGACCACTG ATCATGTTTA GCTCAAATTT ATGTTGGATA GAGGTTATAG GATGGTCCTT 180
 ATCTGAATGC AGAAAGGAAT GTTTATTTTG CTGTTATGTT TTATATGGGA TAATACTTTA 240
 TAATTGTGTG ACTATCCTAT TCCCAACAA ACTCGAG 277

(2) INFORMATION FOR SEQ ID NO:1033:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1033:

GAATTCGGCC TTCATGGCCT AGGTACATG TATAAAATAA TCGTAGCTGT TAATCAAAC 60
 GATCATTGTC TATTTGTTGT TTCACATGTT TTCATTTATT TGTTCATTCA GCAAACACTT 120
 AGTTGTGTGC CAGGAATTAA AATCCAGTGT TGTTCTTTTC TTATTTTTTT TTTGGCTAGT 180
 GGAAAATGAA AACCACTGTG ACTTTGTAAA GCTGCGGGAA ATGCTCATT GTACAAATAT 240
 GGAGGACCTG CGAGAGCAGA CCCATACCAG GCACTATGAG CTTTACAGGC ATCTCGAG 298

(2) INFORMATION FOR SEQ ID NO:1034:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1034:

GAATCTGGA AGACACTGAC TGA CTGGAAG ACCTGGATT CTTTCTGGAA GACACTGATT 60
 GACTGGAAGA CCTGGATTTC TTTCTGGAAG ACACTGATTG ACTGGAAGAT CTAGATTTTT 120
 CTGGAAGAAC TAGATTTACT GGAAGACTTG GATTTGGTGG AAGACGTAGA TTTTCTGGA 180
 AGACACTGAC TGA CTGGAAG ACCTGGATT CTTTCTGGAA GACACTGATT GACTGGAAGA 240
 CCTGGATTTC TTTCTGGAAG ACACTGATTG ACTGGAAGAT CTAGATTTTT CTGGAAGAAC 300
 TAGATTTACT GGAAGACTTG GTAGCCATG AAGGTCGAG 339

(2) INFORMATION FOR SEQ ID NO:1035:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1035:

```

GAATTCGGCC AAAGAGGCCT AGCACTGTAA AGATGAAGCT GGCTAACTGG TACTGGCTGA      60
GCTCAGCTGT TCTTGCCACT TACGGTTTTT TGGTTGTGGC AAACAATGAA ACAGAGGAAA      120
TTAAAGATGA AAGAGCAAAG GATGTCTGCC CAGTGAGACT AGAAAGCAGA GGGAAATGCG      180
AAGAGGCAGG GGAGTGCCCC TACCAGGTAA GCCTGCCCCC CTTGACTATT CAGCTCCCGA      240
AGCAATTCAG CAGAGATCTC GAG                                         263

```

(2) INFORMATION FOR SEQ ID NO:1036:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1036:

```

GAATTCGGCC AAAGAGGCCT AAAGCACCCG CTCCTCACC ACCCCCACTG TTGGGCCTAT      60
AGTAGCAGGT TAGTGAGTAC CTAGGGCGGC TCAACTCCTC CCACAGCACC AACCCAGCAT      120
GGTCCCACTG AAGTCCTACT ACGCCCTCCC CTCCCAGCC TTTTCCAGAA ACCATACTGG      180
GCTCAGATCA GAGCTCCGAA GCGGTCAAAG TGAGCTGAGC AGGACAGGCC CAGCCTTTCT      240
CCACTGCCAC GTCACCCTCG AG                                         262

```

(2) INFORMATION FOR SEQ ID NO:1037:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1037:

```

GAATTCGGCC AAAGAGGCCT ACGGAGCTGT CAGCCAGGGG AGTGGGGTCA GCCGTCAGCC      60
AGCCCTCCCG TTTCCCGCCC GTGGGCCCTG ACCACACTCC CTTTCTAGA AGTCAATCCT      120
AAGGTTTCTC TGCTCTGGCT AAGAGGATGT AAATTTGGAT TCTTAGAGGG CATGGCACCC      180
CCAGTCCCTG CCCAGATAAA GTAGCACAGT GGCATGCAGC ACCTCTGTCT GTTGCTGACG      240
TTGGGGGGCT TACACACCCA CCTCATCTCC GTGCACAGAC TCGAG                                         285

```

(2) INFORMATION FOR SEQ ID NO:1038:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1038:

GAATTCGGCC	TTCATGGCCT	AGCTCTGCAA	GGAAGAGAGC	TTCACGTCTC	TGGTCAGCCA	60
AGCGAGGCTG	TCTCTCCAGC	TCTCAGAGAG	CTCTCGGGGC	TCTCCTGCAG	GAGACCAGGC	120
CAATGCTCCT	GTGCTTCCTG	GGGCCAGTAG	CAGCACCTCG	AGCTCCCTGC	CACCAGGCAG	180
CTGAAAGGCA	TAGCGTGAGG	TGCTTCTCTC	AGTCCCAATT	ATGACAGTGG	CCACCGGAGA	240
CCCAGCAGAC	GAGGCTGCTG	CCCTCCCTGG	GCACCCACAG	GACGCCTCGA	G	291

(2) INFORMATION FOR SEQ ID NO:1039:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1039:

GAATTCGGCC	TTCATGGCCT	AACCTACAG	CAGTGCTTAT	TTTTACATT	CCAAGCGAAT	60
ACCAAAACCT	TCAGCAAAGA	TGGGTTGGT	ATTAACGGGT	TTTTGTCTCA	GAAGTGTATT	120
GTGGATCCCG	GAGTTTCCCC	CAAATCCATC	TACATCAAAT	TGTAGAAGT	AGAGAGGGAT	180
TTTCTTTCCG	CAGGCTCTTT	AGTTGAGTGC	CTGGA AAAAG	CCATTGGATA	CCCCTTAAAA	240
TTTAACAAC	GAATGTCATC	CTTCATAAGG	ATTGGGGCTC	TAGCTCCTT	CTTCTCTACT	300
CACTTCCCAT	TACCCGGACC	ACCCCTCATC	CAGATGCCGC	CGTCAGACTC	TTCATGGA AA	360
CCCTTTCTTC	AATTGGGCCA	GTACGATCTC	GAG			393

(2) INFORMATION FOR SEQ ID NO:1040:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 603 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1040:

GAATTCGGCC	AAAGAGGCCT	ACCCTACTGT	GACACACCTA	CCATGCGGAC	ACTCTTCAAC	60
CTCCTCTGGC	TTGCCCTGGC	CTGCAGCCCT	GTTCACTA	CCCTGTCAA	GTGAGATGCC	120
AAAAAAGCCG	CCTCAAAGAC	GCTGCTGGAG	AAGAGTCAGT	TTTCAGATA	GCCGGTGCAA	180
GACCGGGGTT	TGGTGGTGAC	GGACCTCAA	GCTGAGAGTG	TGGTTCTTGA	GCATCGCAGC	240
TACTGCTCGG	CAAAGGCCCG	GGACAGACAC	TTTGCTGGGG	ATGTACTGGG	CTATGTCACT	300
CCATGGAACA	GCCATGGCTA	CGATGTCACC	AAGGTCTTTG	GGAGCAAGTT	CACACAGATC	360
TCACCCGTCT	GGCTGCAGCT	GAAGAGACGT	GGCCGTGAGA	TGTTTGAGGT	CACGGGCCTC	420
CACGACGTGG	ACCAAGGGTG	GATGCGAGCT	GTCAGGAAGC	ATGCCAAGGG	CCTGCACATA	480
GTGCCTCGGC	TCCTGTTTGA	GGACTGGACT	TACGATGATT	TCCGGAACGT	CTTAGACAGT	540
GAGGATGAGA	TAGAGGAGCT	GAGCAAGACC	GTGGTCCAGG	TGGCAAAGAA	CCAGCATCTC	600
GAG						603

(2) INFORMATION FOR SEQ ID NO:1041:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1041:

GAATTCGGCC	TTCATGGCCT	ATAGAAACAT	CAGTGGGCAC	ATTTACAACC	AGAATGTATC	60
CCAGAAGGAC	TGCAACTGCC	TGCACGTGGT	GGAGCCCATG	CCAGTGCCTG	GCCATGACGT	120
GGAGGCCTAC	TGCCTGCTGT	GCGAGTGCAG	GTACGAGGAG	CGCAGCACCA	CCACCATCAA	180
GGTCATCATT	GTCTCTACC	TGTCCGTGGT	GGGTGCCCTG	TTGCTCTACA	TGGCCTTCCT	240
GATGCTGGTG	GACCCCTCTGA	TCCGAAAGCC	GGATGCACAC	ACTGAGCTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:1042:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 331 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1042:

GAAGAAAAGC	AGAAAGAACT	GGCAGAAACA	GAACCCAAAT	TCAACAGTGT	GAAAGAGAAA	60
GAAGAACGAG	GAATTGCTAG	ATTGGCTCAA	GCTACCCAGG	AAAGAACGGA	TCTTTATGCA	120
AAGCAGGGTC	GAGGAAGCCA	GTTTACATCA	AAAGAAGAAA	GGGATAAGTG	GATTAAAAAG	180
GAACTCAAGT	CTTTAGATCA	GGCTATTAAT	GACAAGAAAA	GACAGATTGC	TGCTATACAT	240
AAGGATTTGG	AAGACACTGA	AGCAAATAAA	GAGAAAAATC	TGGAGCAGTA	TAATAAACTG	300
GACCAGGATC	TTAATGAAGT	CAAAGCTCGA	G			331

(2) INFORMATION FOR SEQ ID NO:1043:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 268 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1043:

GATGGCCACT	TCCCAGGCTG	ACATAGAGAC	CGACCCAGGT	ATCTCTGAAC	CTGACGGTGC	60
AACTGCACAG	ACATCAGCAG	ATGGTTCCCA	GGCTCAGAAT	CTGGAGTCCC	GGACAATAAT	120
TCGGGGCAAG	AGGACCCGCA	AGATTAATAA	CTTGAATGTT	GAAGAGAACA	GCACTGGGGA	180
TCAGAGGCGG	GCCCCACTGG	CTGCAGGGAC	CTGGAGGTCT	GCACCAAGTC	CAGTGACCAC	240
TCAGAACCCA	CCTGACGCAC	CCCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:1044:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 391 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1044:

GTCATTGCAT	CCAAGATAAT	GAAATATCTA	TAACCCCAAA	AGTTTCCTGT	GTGCCCTTGT	60
TATTCATTGC	CCTGCCCAGT	ATTCAGGCAA	CACGGATCTG	TTTTCTGTTT	TAGGTTAGTT	120
TGCATTTTCT	ATAAAGTCTT	ATGAATGAAA	TAATAAAATG	TGGACTATTT	TCATGGGCCG	180
GGGAGCAGTG	TGGCTTCTTT	CATTTCAAAT	GATTGTTTTG	AAATTCATCC	ACAGCGTTGC	240
ACGTATCAGT	AGTAGATTCC	ATTGATTGT	TGATTGTAT	TCTATTGTAT	GCCTGAGTCA	300
AAATTTATTC	ATCTCTTTGT	CTGTTGATAG	CCATTTGGGT	TCTTCCAGTT	TGGGGCCATT	360
ACAAATAGAG	GTACTATGAA	CTTTTCTCGA	G			391

(2) INFORMATION FOR SEQ ID NO:1045:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1045:

GAATTCGGCC	TTCATGGCCT	AATGTGAGCC	ACCGCACCCA	GCCGAATATT	TGTACTTTGT	60
ATAAATTCAT	TGTCTGTTTT	ACAGTTTGAA	TGGCTCTTTT	ACCCTGGCAT	AATTTTGTA	120
CGTGTGGAGC	ATTGGGAAAA	TTTTTATTGG	ATTATGCAGA	TATTTTCAAT	GCTGGTATTT	180
CATTATATGA	TAGTAAAAAA	TCACTTTTGG	TTTGTGTTTG	TTTTGTTTAT	TTTCTTTTT	240
TTTTTGAGGC	AGAGTTTCGT	GCTTGTCGCC	CAGCCGAAGG	CGCTCGAG		288

(2) INFORMATION FOR SEQ ID NO:1046:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1046:

GAATTCGGCC	TTCATGGCCT	AGTAACTTCA	TAACATTGCT	GGTGTGAGG	TGAATCTTAG	60
TGGTCATCCA	GTCCCAAGGC	ATCCTTGCCA	GCCCCCTACA	ATACCTGGAT	GGGCGCTTAT	120
CTTCAGGTAG	GCCTGAGCCT	TTCTGGTAAA	GAGGAGCTCA	CTATTCTTAA	AGGAAACCTG	180
TGCCATTGGG	TTAAAAAAGT	ATTAATTTTT	AAACATTGGT	AGTTGTTAAG	CAGTTGTTGA	240
ATATTTTGAG	CCAAAATTG	TTACCTCCCA	TACCTCGAG			279

(2) INFORMATION FOR SEQ ID NO:1047:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1047:

```

GAATTCGGCC TTCATGGCCT AGCAGCATTG AAGGAATTAA TATTAGTCAC TGAGAACAAA      60
AAGCGAAATT AGAAAATTTC AAGTCACTTC TAGGCTTGTA GGGGAGAAGA CGTGTAGTGA      120
TGAATTCTAT CATTTATGAA GTACCCACTG GATCCCACAC ACTGTGCAAG ACCTTTAGAT      180
CAGGCGCCTC CCTCGGTTT CTTCACCCTG TGCAGCAGGT GCTGTTATTT CCTTTTAA      240
ATTATTATTT ATTATTATTA TTTTGTGAGA CAGGATCTCC CTTTGTCACT CAGGCTGGAA      300
TGCAGAGGCA TGATCACTGC TCACTGCAGC TTCGACCACC CGATCTCGAG      350

```

(2) INFORMATION FOR SEQ ID NO:1048:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1048:

```

GAATTCGGCC TTCATGGCCT AAAGCTTTTC AGTACTGTTT ACAAATTTGG TTTTATGTG      60
TCAACTTAAA AGCATGAGTC TAAATCTATT AGTCATACCA AATTGTTTCA TTTTATTTA      120
TTTTATAGAG ATGGGGTCTT GCTGTATTGC CCAGGCTGGT CTCAAACGAC TAGGCTCAAG      180
CGATCCTCCC ACCTCAACCT CCCAAAGTGC TGGGATTACA GGTGTAAGCC ACCATACACA      240
GTTCTCAAAT TATTTTATAC AATACAAACA TTAAAAATAT AAATCATGCA CTCTCGAG      298

```

(2) INFORMATION FOR SEQ ID NO:1049:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1049:

```

GAATTCGGCC TTCATGGCCT AGAGCTTTGG TGCTTTTCAC ATAAGGAACT TACTTGGGCT      60
AAAAAGTAAC CTCAGAGAAA CAGTGCTCCC ATTTGGTGGA TAAGGAACT GAGGTTCCAA      120
ACATGAGATG TAATAGCTTG CCCCAAATCT AGCCAGTGAG CAAGAGAGTA GACTTTTGCC      180
TGTGCCAAA CAGTAATCAC CATCCACAAG TGGCTATTTA AATTTTAATT ATTACAATTA      240
AATAAAGTTT AAAATCCAGT TCCCCAGTCC CACTGGCAAC TTAACAGCTA CCAGTGACTG      300
TACCATATAT AACAGCATAT ATAGACATAC AGCATATACA ACACATACAT AGGGATTCCC      360
ACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1050:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1050:

```

GAATTCGGCC TTCATGGCCT ACAATTTTAA AATTAAATTT TTTTCTATTT TTTTGCAATT      60
ATCAACCTAA CACATTGAAG AAACCTGGGA AATATAGAAA AAACACACCA AAAAGTATCA      120

```



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GAGTTACACT AAAATGTTCA TAGTCAGTAA TATAGTCTTT CAGATTTTTT TTTCTGTGTC 180
TGTCTGCTGT CTATGTCCAT GCCTACCTTA CTTTCTTCCC TCTCTCTTCC CTCCCCACCC 240
TCCCTTCCTT CCTTCCCTCC TTCCCACCTT CCCTGCTTCC TTCTTGCCTG CCTCCCTTCC 300
TGCCTGCCTC CCTTCCTGCC ACTTACATTG TGTAAACAAT GAGAAAAAAA TTCCCCCATC 360
ACTCGAG 367

```

(2) INFORMATION FOR SEQ ID NO:1051:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1051:

```

GAATTCGGCC AAAGAGGCCT AAGAAGACCT CAGCCTTCGC CTGAAAAAGC TGACTCACGC 60
TGCCCCCTGC ATGCTGTTCA TGAAGGGAAC ACCTCAAGAA CCACGCTGTG GTTTCAGCAA 120
GCAGATGGTG GAAATCCTTC ACAAACACAA TATTCAGTTC AGCAGCTTTG ATATCTTCTC 180
AGATGAAGAA GTTCGACAGG GGCTCAAAAC GTACTCTAAT TGGCCACCT ATCCTCAGCT 240
CTATGTTTCT GGAGAGCTAA TAGGAGGACT TGACATAATT AAGGAGCTGG AAGCATCAGA 300
AGAGCTGGAC ACGATCTGTC CCAAAGCACC CAATCTCGAG 340

```

(2) INFORMATION FOR SEQ ID NO:1052:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1052:

```

GAATTCGGCC TTCATGGCCT ACTATGGACA GCCACAGNTC TTCCCAGGAC AAGACCCTGA 60
CTCACCCAG CATGGAACT ACCAGGGAGG GAGGGTCCCC CATCCTACTA TGACAACCAG 120
GACTTCCCTG CCACCAACTG GGATGACAAG AGCATCCGAC AGGCCTTCAT CCGCAAGGTG 180
TTCCTAGTGC TGACCTTGCA GCTGTCGGTG ACCCTGTCCA CCGTGTCTGT GTTCACTTTT 240
GTTGCGGAGG TGAAGGGCTT TGTCCGGGAG AATGTCTGGA CCTACTATGT CTCCTATGCT 300
GTCTTCTTCA TCTCTCTCAT CGTCCTCAGC TGTTGTGGGG ACTTCCGGCG AAAGCACCCC 360
TGGAACCTTG TTGCACTGTC GGTCTGACC GCCAGCCTGT CGTACATGCT GGGGATGATC 420
GCCAGCTTCA ACAACACACT CGAG 444

```

(2) INFORMATION FOR SEQ ID NO:1053:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1053:

```

GAATTCGGCC AAAGAGGCCT AGATATTCAT TTCCATTGGA GCTGGTATTT TTAAGGTCTC 60

```

GTGACGTCAG	TGACCTCATT	TTACTTGATC	TATTAGCAGC	ATTCATACA	GTTGTTGACT	120
CTTCTCCATT	AAAACATTTA	CTTTATTGG	CTTCTAGGAA	ACATATTTTC	CTGCTTTTTC	180
TTCTATTTC	TCTGACTCTT	TTCTCAGTTT	CCTTTGCTGT	TTCCTTTTCT	ATCCTCTAAA	240
CATTGAAATA	TCCTAAGCCT	AGTTTGGGAT	TCCCTTGATG	GTCTTCATTT	CTTFAATGGG	300
AACTGTGCTG	GTGACTCAAA	TTTATATCTC	CAGCCAGAAC	CTTTCTCCTG	AATTCCAG	358

(2) INFORMATION FOR SEQ ID NO:1054:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1054:

CCTTCATGGC	CTACTTCTGG	TATTACATCA	CACTGATCAT	GCTGCTGGTG	GCCGTGCTGG	60
CCGGAGCTCT	CCAGCTGACG	CAGAGCAGGG	TTCTGTGCTG	TCTTCCATGC	AAAGTGGAAAT	120
TTGACAATCA	CTGTGCCGTG	CCTTGGGACA	TCCTGAAAGC	CAGCATGAAC	ACATCCTCTA	180
ATCCTGGGAC	ACCGCTTCCG	CTCCCCCTCC	GAATTCAGAA	TGACCTCCAC	CGACAGCAGT	240
ACTCCTATAT	TGATGCCGTC	TGTTACGAGA	AACAGCTCCA	TTGGTTTGCA	AAGTTTTTCC	300
CCTATCTGGT	GCTCTTGAC	ACGCTCATCT	TTGCAGCCTG	CAGCAACTTT	TGGCTTCACT	360
ACCCAGTAC	CAGTTCAGG	CTCGAG				386

(2) INFORMATION FOR SEQ ID NO:1055:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1055:

CGATTGAATT	CTAGACCTGC	CTGTGCTCCT	CGATGGTGTC	TCTCCCTCCA	GAAAACGCAT	60
GCTTATGAC	CTTGTTTTG	ATCTGCTTGG	CCGTGTCGCT	CGAG		104

(2) INFORMATION FOR SEQ ID NO:1056:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 650 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1056:

GAATTCGGCC	AAAGAGGCCT	ACACAAGGCT	AAGGGTATTG	GATATAACGG	AAAGTGGAAG	60
CTATACCTGA	CTTCCAGAGA	ATGTGGACCG	GATATAAGAT	CTTAATCTTC	TCTTATCTTA	120
CTACAGAAAT	CTGGATGGAG	AAGCAGTATT	TATCTCAAAG	AGAAGTGAC	CTAGAGGCTT	180
ATTTCACTAG	GAATCACACC	GTTTTGCAAG	GTACTCGATT	CAAAAGAGCC	ATTTCCAAG	240
GGCAATACTG	TAGAAATTTT	GGCTGTTGTG	AAGACAGAGA	TGATGGCTGT	GTCACTGAGT	300
TCTATGCGGC	GAATGCGTTG	TGCTACTGTG	ATAAATTCTG	TGACAGAGAA	AATTCTGATT	360

GCTGTCCTGA	CTACAAGTCC	TTTTGCCGTG	AAGAGAAAGA	ATGGCCTCCT	CACACACAGC	420
CTTGGTATCC	AGAAGGTTGC	TTCAAAGATG	GTCAACATTA	TGAAGAGGGA	TCAGTAATTA	480
AAGAAAACCTG	CAACTCCTGC	ACATGCTCAG	GACAGCAATG	GAAATGTTCC	CAGCATGTAT	540
GCCTTGTTTCG	TCCAGAATTA	ATTGAACAGG	TCAATAAAGG	AGACTATGGA	TGGACAGCAC	600
AGAATTACAG	CCAATTTTGG	GGAATGACTT	TAGAAGATGG	ACTCCTCGAG		650

(2) INFORMATION FOR SEQ ID NO:1057:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1057:

GAATTCGGCC	AAAGAGGCCT	ACACGTATTG	GCCAGGATGG	TCTTGATCTC	CTGACCTCAT	60
GATCCGCCGG	CCTTGGCCTC	CCAAAGTGCT	AGGATTACAG	GCGTGAGCCA	TCGCGCCCAG	120
CTGAGAATAG	TTTAAAGAA	TGGTTGAGAG	GCAGTTGCTT	TTTCTTTGAA	TATCTAGAAC	180
TGTTCTGGAC	TAACGTCAA	GAAACACCAT	GGCAACATTA	AAGGGAAGAT	TATTTGAGAG	240
GCGGGGGATA	GTATGGCTTA	GGACTTGGGC	TGCTACCTTT	GACTTTGTAA	TTCAAAAGAT	300
TGTAATGTTT	CATATTTTCA	ATCTGATCAT	TAAAAATATC	TGTGTTACAT	GCAAAAAAAT	360
ACCTATAGGC	AACTCGAG					378

(2) INFORMATION FOR SEQ ID NO:1058:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1058:

GAATTCGGCC	TTTCATGGCCT	AATTTTAACA	TTTACATAGA	CAATTCATTT	GGTGTTTTGT	60
CTCCTAGTTA	TTTGGCCCAA	TCTCTGATGA	TTTCCACTCT	GTCTTGGCCA	CTCACTCCGT	120
TTGTATATATC	TTGGCCATTA	TCATCACCTC	AAATTGCTCC	ATCTTCAAAA	TACTTGCATC	180
TTATTATTATG	ACCATATATC	TTCCACTTGG	TTTATTGAAC	TATTCCTCT	ATCATTCTCT	240
GATTTCACTG	CAGCCAATG					259

(2) INFORMATION FOR SEQ ID NO:1059:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1059:

GAAAAAACT	ACTAACCCT	GCAAGCTCTT	GTCAAATTTT	AGTTTAATG	GCATTGCTTG	60
TTTTTTGAAA	CTGAAATTAC	ATGAGTTTCA	TTTTTTCTTT	GAATTTATAG	GGTTTAGATT	120
TCTGAAAGCA	GCATGAATAT	ATCACCTAAC	ATCCTGACAA	TAAATTCAT	CCGTTGTTTT	180

TTTGTGTTGT TTGTTTTTTC TTTTCCTTTA AGTAAGCTCT TTATTCATCT TATGGTGCAG 240
CTCGAG 246

(2) INFORMATION FOR SEQ ID NO:1060:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 103 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1060:

GAATTCGGCC TTCATGGCCT ACGAGAGTAT ATTGGTAGGG CTGGAATTTC TGGTTCATAT 60
GGTAACTAAC TCTATGTTGA ACATTTTGAG GAGCCCTCTC GAG 103

(2) INFORMATION FOR SEQ ID NO:1061:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1061:

GAATTCGGCC TTCATGGCCT AAAAGGTTAG GCAATCACTG GGACCCGCAT GGTGTTCTCT 60
CAAAGAATAG GGTAAAGGAG AGCTGGGAGG GAGCCCTCTC CGTTGGGTGA CTCTGTGTG 120
CCCTTTAGAC AGGCTGGCCT GCCGGTTCCA CAGGGTACAG TTAGGACTTG AGTCTTTCTT 180
TTTCTGTTT GAGTTGGTGA GTGAGTGATA GGGTAACATG GGCCTTCAGG ATGACCCCTT 240
GGAAGTGTGC CGAGTTCCTT AAATCTCAGC TGGGATCCTG GACCTGGGAG GCCCTGTGA 300
GGGCCAGCTC TGGAAAAACC TGGGAGTTGA TGCCGGAGGC TGTGGAAGAA CTCTGCTCGA 360
G 361

(2) INFORMATION FOR SEQ ID NO:1062:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 292 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1062:

GAATTCGGCC TTCATGGCCT AAGAAAAATT GGGAAACAAGC TAAGTGCCCA CATAGTTACA 60
AAAATTACGT TAAATAGATA CACGGTTGCT TTAAAGCTCC ACATACAGCA CCATAGAGCT 120
TTTTATATAT TTGTAGGCAT TAAAGCAATT CCAGGAAGGA TCTAAACCAA ACACCTTGACC 180
CAGGTTGTCT CTCTGGGGAG TGGAGCCACA TGGGATTTCA CTGTTTCTGT ATTCTTATTA 240
CTTATATTAA AACACACATG AACAGAAGAA AAAATAGCCC CAGTATCTCG AG 292

(2) INFORMATION FOR SEQ ID NO:1063:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1063:

```
GAATTCGGCC TTCATGGCCT ACCGTGTGTA CACTTCTGGA CACAAGTTGG GCCGAAGTAA      60
GCCAAGCCCA GTCCTTCCTG TTTCCTTTCT CAGGAAATGT GACCACGTGC ACTGGGAAGC      120
TTTGTGTAAA GTAGATAGGG GTATGAGCCA ATTGCCCAGC ATTGGTGTTT TGTTTTTTGT      180
TTGTTTGTTT GTTTTCACAG AGTCTTGCCC TGTCACCCAG GCTGGAATGC AATGGCGTGA      240
TCTCAGCTTA CTGCAACCTC TGCCTCCCAG GTTCACACAA TTCACCTGCC TCAGCCGCCT      300
GAGTAGCTGT GATTACGGGC ACCGTCTCGA G                                     331
```

(2) INFORMATION FOR SEQ ID NO:1064:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 136 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1064:

```
CGAGTGTTAC ATTCGTTCTT CCGCTCAAAT CCTGATCTGG TCCATTAAAG AGTGTTTCGCA      60
GACAAAGTTT CTGAAAGATT AGAGAAGAAT CCCCCAAGAA TCAATTACAA CCAAATGGA      120
AAGGGACAAC CTCGAG                                     136
```

(2) INFORMATION FOR SEQ ID NO:1065:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1065:

```
GAATTCGGCC TTCATGGCCT AGAATAAAGG AAAATTCAGG TCATAGATTG AGTGCTATAT      60
TTGAAGTAAA TACAGACCTT CAAAAAATA TAATATCAAA AATCACTGCT GAGCTCTCCT      120
GGCCTTCCAT ACTTAGCTCA CCCCGGCACT TGAAATTTC ACTTACTAAT ACAAAGTCT      180
CCTCAGAAGA AGAGATTACT TTAGAAAATC CTGCAGATGT TCCTGTCTAT GTTCAGTTTA      240
TTCCTCTGGC TCGAG                                     255
```

(2) INFORMATION FOR SEQ ID NO:1066:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1066:

```

GAATTCGGCC TTCATGGCCT ACAACCTGCT TTCCACCTTC TGTAATCTCC CATCAGTGAT      60
AAATTACCCA TCAGCTTTCC AGATTCCAGA ATTTTGCTGA CATCTCCTGT TGGCTATGTT      120
CTTATTTCCCT TTTCTGTTTA TTCCTGTGAC CTTGTGCCCT TTAATTCTTT CCCATAATTT      180
GTTGGGACTT CAGAAGGAAG TGGAGCTAAA GGCATGTGTC TGCCTGCCCC ATCTTGGCTG      240
GAAGTTGGGA AGGCCTTCCT TCCAAGGCAC CCAGCATAGC ACCTGGCACA TGATGGATGC      300
TCAGCAAATG TCTGTGGGTC TTCTTTTAC TAAACAGGCA GTTGATTTCa CCAGAAGTAG      360
TGACCACCTA AGTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1067:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1067:

```

GAATTCGGCC TTCATGGCCT AACACAGCTC ACATCAGAAT ATAATAGTGG AACTAGGGTG      60
ACTTCACTCC CTTTCACCTG ATGTCTATCT TGGCCTTTTA GCACCTTGAC TATCCCTGAA      120
AAGACTGGGT CTTTGTTTTT CCAGGGAAAA AACGAAGTGA TGTAGATCTA AGAAATAGTG      180
CCTCTTTAAT ATTTAATTCT TACATGACAA CTAACACACA GGGAAAAGGC TATGTTAAGT      240
TGATTATAGC TCCTCTTAAA ATGTCCTATG CTGTCAGTTG GTCTTAGAGA CATGGGAATA      300
ACCAAGCAAT CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1068:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1068:

```

GCGATTGAAT TCTAGACCTC ACCTCTGATC TATCTCTTTT ACCTCAGCAA TTTATTTCCC      60
AATTATTATA TCTACTTTAT TGTTCTTATG AGACAATAGA CTATGATAAT TTTCCAGAAA      120
TAATTTTGTT TTCTTCCTCC CATCTTCTAA TGTTGAGACC GTTCTCTGT TTTCTTTCAT      180
CTCTACCCCT CAGTCTCATA GGTTTATTTT TCATTTCCTA TCCAGCGATT TCAAAACCTG      240
TACAACAAAC CAACTCAGCA GCCCTTGGCA ACTTGAGGAG ATTTACAAAA CCACTCGAG      299

```

(2) INFORMATION FOR SEQ ID NO:1069:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1069:

```

GAATTCGGCC TTCATGGCCT ACCATTTCCTA CAACCATTTT AATCTGCGCA TCGGTCCCAG      60
ACGTAGGGAT TCCTCGTCTC ATCTTGGAAG CATTGCCAGC AGTGGTTCTG ATTTGGAAGC      120
CTGCGTCTGT CACGTGACAC CGTCTGAGCC TGTGCCTGCC TCTCTTTCTT CCGGCAGTGC      180
CCTGTACTCT GTGGGGATGA CGGCAGTGGG CCTGGCCATC CTGTGGTATG TTTTCCGTCT      240
GGCCGGGAGA CTCGAG                                     256

```

(2) INFORMATION FOR SEQ ID NO:1070:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1070:

```

GAATTCGGCC TTCATGGCCT AGCCATCATG TTTATTAGAA GGTGGGATTT TGGTGTGTGC      60
TCTAGACAGA TACAGAATAA ATACCTGCGC CTTGAGAACA GGAAGTCCAC GATTCATACA      120
AAGTGCTCAC TACAGGAAGT TGCTGTGTCA AAATCCAGGC AAGGACCCAA CTCGGGGCAG      180
CCCCTCCTCC CTGCTGACCT CAACAAGGCG TGTGCTATTG TTTTATTATT TATTATTTTA      240
TTTCTCTTTA TTATTATTAA TATTATTATT ATTTGCTTTT GCTGTGGTCA CTATCATTGG      300
CAAAGTTCCT TTTCCCTCGA G                                     321

```

(2) INFORMATION FOR SEQ ID NO:1071:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1071:

```

GAATTCGGCC TTCATGGCCT AGGGAGGTAT TTGTCATTGT GAAAAGCTGG GAATCTCAAA      60
CATAGTCAAC TTAACATAAA AGAAGCTAAT ACAGGTTGAG CATTCTAAT CCAAAAATCC      120
AGAATCCAAA TTGCTCCAAA ATCTGAAACT TTCTGAATGC TGACCTGATA CTACAAGTAG      180
AAAATTCCAC ATACAAGTAC TTAACACAAA CTTTGTTTCA TGCACAACT ACTAAAAATA      240
TTGTATAAAA TTAACCTCGA G                                     261

```

(2) INFORMATION FOR SEQ ID NO:1072:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1072:

```

GAATTCGGCC TTCATGGCCT ACTTGGGCTC ATTTATTGTT GTGAATTGTA TCCTGGCTGT      60
GGTGGCCATG GCCTATGAGG AGCAGAATCA GGCCACCTTG GAAGAAGCAG AACAAAAAGA      120
GGCCGAATTT CAGCAGATGC TCGAACAGCT TAAAAAGCAA CAGGAAGAAG CTCAGGCAGT      180
TGCGGCAGCA TCAGCTGCTT CAAGAGATTT CAGTGAATAA GGTGGGTTAG GAGAGCTGTT      240

```

GGAAAGTTCT TCAGAAGCAT CAAAGTTGAG TTCCAAAAGT GCTAAAGAAT GGAGGTCCCT 300
CGAG 304

(2) INFORMATION FOR SEQ ID NO:1073:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 397 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1073:

GAATTCGGCC TTCATGGCCT AAAAAAGCTA ATGTCATAGG TCTTTATATG TGGGCAGGGT 60
 TTATAAGTTG TCTAAGGGC CATCAGGTAG AGTTGGCCTT TTCTGTTGAG GTCCCCATAA 120
 TTTCAGTGGG GGTCTTCTCT TTGGGGCCAG TTTCTCTAGA AACTGGGGTC CTGATAGTAG 180
 GGTAAGAAAA GACAGCTGAG GACCCCAAGA TTTGTATGAT GACTTTTACT TAATCCCTCT 240
 ATCTTCATCC TCTCTCATGC CCATCCGGCC CCACCCCCCA AATCCTCCTC TGGCTGTGTA 300
 CCCTCAGGTT CAGTTTTTCC TGTCAGTGGG GGTGAGGGT GGGGCGTAGG CTGGCTGTGG 360
 AGAGTAGGGG AGAGGACCTG GGTTCAGTA GCTCGAG 397

(2) INFORMATION FOR SEQ ID NO:1074:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 309 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1074:

GCGATTGAAT TCTAGACCTG CACCACTGCG ATCCCTACGC CTGAGGAAAT GACAAGATTG 60
 AGAAGCATGA ACAGACAACCT CCAGATAAAT GTTGACTGTA CACTGAAAGA AGTTGACCTC 120
 CTTCAATCTA GAGGAAACTT TGATCCAAAA GCCATGAATA ATTTTATGA CAACATAGAA 180
 CCTGGCCCGG TTGTACCACC CAAGCCATCT AAAAAAGACT CCTCAGACCC CTGCACAATT 240
 GAGAGAAAAG CCCGAAGAAT TAGCGTGACC TCCAAAGTAC AGGCAGACAT CCATGACACC 300
 CATCTCGAG 309

(2) INFORMATION FOR SEQ ID NO:1075:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 243 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1075:

GAATTCGGCC TTCATGGCCT AGAAAACTAA ACATTGTCCT TTTATAAAGA CTGACAAAAT 60
 ATAAATCTTT ATTCTAACCCT TATCCCCAAA ACTAGCCAGG CCACACCCCA GATGTTCTTA 120
 TTGACTATTG GGAAGATAGA AAAGGCGTTG TGTTTTTTGT TTTTGTGTTG TTGTTGTCAT 180
 TGTGTTTTT TCAGAAGACC AGTGTCTCAG TTCTGTCTTA GTAGTACCAC ACCCAGACTC 240
 GAG 243

(2) INFORMATION FOR SEQ ID NO:1076:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1076:

```

CTCGAGCTGG GGGCCACTTT GGCACCTAAC AAAACCAGAG AAAACAAGTG CAACTAAGCA      60
AGCAACTATG CACATTCCAG ACATAAAGAT CATTAAATAA CGCCTTAATC TAAGGATCTG      120
TTGGTTCTAA CGCCAGAAAA AGAAGTTAAA TTTTAAAAAA TATCTAAAAG AGATTTTAAAG      180
TGGGCAAGCA ATAGAGAAGA TACCCAACAC TGAGAAACGG AAAGGAAAAA AGACCACCCT      240
AATAACTACT GCTCATCAAT ATACATCTAT AATTCTACCA GAACAGTATT AAGAAATGAG      300
AAACGCCAAT ATTACATAAA ATAAGGTAAA AATAACTAAG CATAGGTTAG TGTCAGGGGA      360
CCTAGGGTTC AGACACCCAG AGTTTTATAT AAGGATAATT TGTCTTGAAT CAAGACCACA      420
CTGTCTCTC CTTAAACCTA ACTGCTACAA GCAGACACCA CCTCTTCTGA CTGGGCTGAA      480
GTGTGGGAAA CAGTCCAAAA ATTAGGTATC ACACCATAAA CCCTCCACAA GAGCAACCTT      540
TGCTCTCAAT TAAGTTGTTG ACAAATAAT TCTCAACTTG CCTAGGCCTG CCGAATTC      598

```

(2) INFORMATION FOR SEQ ID NO:1077:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1077:

```

GAATTCGGCC AAAGAGGCCT AGGTGGGTAT TTGAATGGTT TTGCTCCAAA ATTGAAGTCA      60
CATTGTTGAT ATGACATGAA ACTAGCTGCA GCAAAAAATC CAGATACAGT AGATGAAAAG      120
ACTTGCTTTT CAGGAGGCAG CTGGTTGCCA TTAAAAAGA AGATCATTG CTTTTCATTC      180
AAGTCTAACA GAAATCCTAC TGTATCTCCT TCTTCCAGC ATGGGTGTAT GTGAGGCTTA      240
CTTCTGGCAT TGTACCAAAT CAGCTGCCGG CAGCCATCAT ACGCACAGGA GTATTCATCA      300
TCCCAATGC CGTAGCCTTC ATGATTGAGG AATTTGCTGT CTCGAG      346

```

(2) INFORMATION FOR SEQ ID NO:1078:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 419 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1078:

```

GAATTCGGCC AAAGAGCCTA GCTCCTGTTA CCATTATTAT TATTCATACT CATATTCATT      60
ACTTCTAACT TCAAGTGGGC CATTAGCACT AACTGGCATA CCACACTTCT CTAGTCTATT      120
TATTCTCCTT GATGACTATT TCATACCCTT CCCTCTTTC CCAAACTTCC AACACCTCCT      180
CTTCCCATCA TTCTCAGCTG ACGGCCTTGC TTTCTCCCAT GATTGGGACT AGAGAAGCAA      240
TTTGTAGGGA ATTCCACAA GCTCCATCAC ATGTGGCCAC TCATCTACAT CTGGATCCAT      300

```

CTATTTGGCC TTCCCTATTG TTCTTATACA CTCTCCCTGT CTTACTTTAT CTAAGGTCAA 360
CATCTCCACT CCACTTATGC ACTAGATCCT GGCATTACAC CAGCAATCCT CACCTCGAG 419

(2) INFORMATION FOR SEQ ID NO:1079:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1079:

GAATTCGGCC TTCATGGCCT AGCTTATTCT TTTTCTTTT TCTTTTTTTT TTTTTTTTTC 60
GAGACAGGGT CTTTCTTTGT CACCACAGGC TGCAGTGCAG TGTTGTGATC ATAGCTCACT 120
GCAGCCCTCA ACTCCAGGCC TCAAATGATC CTTCTGACTC AGCCTGCTGA ATGACTGACA 180
TTACACGTGC ATGCCGCTGT GCCCAGCTAA TTTTAAATT TTTGTAGAG ATGAGGTCTT 240
GCTTTGTTGC CCAGACTCGA G 261

(2) INFORMATION FOR SEQ ID NO:1080:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1080:

GAATTCGGCC TTCATGGCCT ACATTAAACAG ATTAATCCAT CTGTATAGGG CTTTGCTGT 60
TGGATAGAAT TTAAATTGTC TACATAAATA TTTGTTTTAG GACCCTTAGA TTTTATCTGA 120
ATACACAGAT TAGGCTTTAA AAACAGATAT ATATGTCATT TTTGGCTTAA GGAGTTTGGC 180
TAAGTTAGCT TTTCAACTGG TTCTCGAG 208

(2) INFORMATION FOR SEQ ID NO:1081:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1081:

GAATTCGGCC TTCATGACTC CTGATTCAGG GGTCACTTTA CTTCAATAAA AATCATTAGA 60
AAAGGAAGAA TTATGCCAAA GACTTAAAGA ACAGTTAGAT GCTCTTGAAA AAGAACTGC 120
ATCTAAGCTG TCAGAAATGG ATTCTTTTAA CAATCAACTA AAGGAACTGA GAGAAACCTA 180
CAACACACAG CAGTTAGCCC TTGAACAGCT TTATAAGATC AAACGTGACA AGTTGAAGGA 240
AATTGAAAGG AAAAGATTAG AACTAATGCA GAAAAAGAAA CTAGAAGATG AGGCTGCAAG 300
GAAAGCAAAG CAAGGAAAAG AAACTTATG GAAAGAAAAT CTTAGAANGG AGGAAGAAGA 360
AAAACAAAAG CGACTCCAGG AAGCCAAGAC ACCAGNAAAA ATTCCAAGAA GAGGAACGTC 420
TCGAG 425

(2) INFORMATION FOR SEQ ID NO:1082:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1082:

GAATTCGGCC	TTCATGGCCT	AAGACTTCTT	GCAGGAAAAA	TGAGTGCATT	GAGGATAGTA	60
ACCTGACTTT	CTGACCTGTG	ATTAAATTAT	GATAGTAGTC	AGTCATTTTA	CTCTCCCAGG	120
GTTTGAGGAA	GTGGCCGGTG	AGGACTTGGA	GCCTAGTGAG	GAGTTAGTAG	AGCTGCCCAG	180
GGTGGAGGAG	GCCACAGAGG	ACAGCCCTGG	TGAAGAGAAC	AGTGAGGCCT	TGGATGTGTT	240
GATATCCAGC	AAGGACCTGG	CACTGTCTAG	TGAGGACGAG	GCCTGCACAG	GATCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:1083:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1083:

GAATTCGGCC	TTCATGGCCT	AAGTCACTTG	TGTAACGTAG	TTATACTTTG	CTGCATTNTA	60
ATTAACTTTC	AACAGCTATT	AAAGTGGAAT	GTAAGTTAAA	TTTTGAAGGA	AAGGAAATAA	120
ATGTTTTCCA	TATTTCTGCT	TGATTTACTT	TCTGTATGAG	AACAGCTGTG	TTTTTGATAG	180
GTTTATGGTT	TGCATGAGTT	CATATTTAAA	GTGATCCAGG	CCAATGCATG	GCTATTGCTG	240
TAAATCTTGA	TGTTTATTTT	TGCCTTGTA	AGTTCTATCA	CGGCCTACCT	GGAATTAAAA	300
ATTCAGTAGA	CAAATTAATT	GGTCCTCTGC	ACAACTTTTT	TAATAAGTAG	ATTATTTTAC	360
AAAGAAATTT	GAACAAATTT	AATTGAATCT	TTTGTTTAGC	TTGCCTCTAA	GAACCTTTCT	420
TAATAAAGCT	CCCAAACACT	CGAG				444

(2) INFORMATION FOR SEQ ID NO:1084:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1084:

GAGTGAGACT	CCCTCTCAAA	GGAAAAAAA	AAGTTTCTA	GGATCAAAAT	AGGAAAACAG	60
TTGTTTCAGA	ACTCATGATA	TGAGTCATGA	CTACAACCCA	CCATATTCAG	TAAAACTCA	120
CCTTGTCCTG	TTGTCTGACA	TTAAGTGTTT	TACGAGATCC	ATACCTGTGA	AATCAGCTCC	180
TCTGGAATGA	CAGATGCTGG	AATAACTGGC	TGGGGCTGAC	TGCCCCAAAAG	CCCAGACCTT	240
CGATCCCGTC	CTGTCCGAAT	AATCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:1085:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1085:

```
GAATTCGGCC TTCATGGCCT ACTTTAAGTG AACAAACANCA ACAAAAAAGT TAAGGGTAAG   60
ATGAGGCAGC TTTTCAGTGG AAAATACTTG TCTTGGGGAC AGTATGTCAT GTCCCTATAC   120
CTGGTGCCAT TGATAAGGTT ATTCATTCAA CAATATTAC TGATCACTGG CATATGCCAA   180
GCACTCTGCC AAGTACTAGG GATATAAACA TTAGAAAGAC AAGTTCCTCC CTTTTCAGTC   240
ACGATCTCGA G                                     251
```

(2) INFORMATION FOR SEQ ID NO:1086:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 258 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1086:

```
GAATTCGGCC TTCATGGCCT AGAGCTTCAC GGAGGCAAGA GGGTAATGGA GTGCCTAAAA   60
AAAGCTCTAA AAATAGCAAA TCAGTGCATG GACCCCTCTC TACAAGTGCA GCTTTTATA   120
GAAATTCTGA ACAGATATAT CTATTTTAT GAAAAGGAAA ATGATGCGGT AACCAATCAG   180
GTTTTAAACC AGCTTATCCA AAAGATTCGA GAAGACCTCC CGAATCTTGA ATCCAGTGAA   240
GAAACAGAGC AACTCGAG                                     258
```

(2) INFORMATION FOR SEQ ID NO:1087:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 391 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1087:

```
GAATTCGGCC TTCATGGCCT AATAAAAAGA ATTATCAAAG AATTGCAGGG GAAACCCCAT   60
AGAGAAGACT CATTCTTAGA TGAGTATACA ATCCATGGGG GTCTTTAGGA TATTTAACTG   120
ATTTGGGAGA GGTCCGATAA AGAAAAAGGA GCATTAACCT TGACTATGCC TTTAGCTCCA   180
GCCGCCTCTT TAAGAGGAAA TTGTTGGGCA GGTGGGGGAA GGCTAGTCAT GGAACGAAAC   240
TGTAAGCCAG ATCGGGTGTG AGGAGGGGAG GTGATAAAG GATTATAGGG TGGGAGAGCA   300
CAGGCTGAGG AAGAATTGGG ACCTGGCTCA GCCTGGCAAG GCACAGCCTG GGGAGGAGGG   360
GAGAGGTCCT GTAGAAAAGG AGGATCTCGA G                                     391
```

(2) INFORMATION FOR SEQ ID NO:1088:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 368 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1088:

```
GAATTCGGCC TTCATGGCCT AGCCTTCNAA GTTTGAATGG CCCTTAGGTT TTAAGTTATC      60
TATGCAAAGA TGAANAAGGC CTTACATTTC TCAAAGGTGA CAACTCATAC CCAGCCATTT      120
GCTTATTTT GCCTGCAGAC CTCCAATGGA AGTCCGGGCA CATGGCGGAG AGCCTCACCA      180
ACATGCCACG GCACTCCCTC TACATCATCA TTGGAGCCCT CTGCGTGGCC TTCATCCTTA      240
TGCTGATCAT CCTGATCGTG GGGATTTGCC GCATCAGCCG CATTGAATAC CAGGGTTCTT      300
CCAGGCCAGC CTATGAGGAG TTCTACAAC TCCGAGCAT CGACAGCGAG TTCAGCAATG      360
CACTCGAG                                         368
```

(2) INFORMATION FOR SEQ ID NO:1089:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 409 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1089:

```
GAATTCGGCC TTATGGCCTA GTTCATTTAA CTAATACTTG TATTAAATCA CTTCTAAATG      60
CTTATTATAC CCTGTATTAT AGTATTATAT TCTGAGTCTT AAAGGTGCCT AATGTGAAGA      120
TTCTCTCTCT ACATATTCAA CTCTTACTAA CTTTGGCTT TAGGTAGAAA TCAGTTAGTG      180
TATTATATGA TAAAATAGGA AACTATTTCC CTAGGGGTAT AGGTATTCAG TAGGGAGCTT      240
TGGAGTCTCA ATGAGCTTCT TAAAGAAGCA TTTTAAATGG TAGGTTTATG GGAGAGTTTT      300
TGTAAGTAAGA TAAAGTAGAT GAGAAAGTGT TGCCTCTAAA CAATCAACAA GCTGGGAATG      360
GGGTGCAGAA TGAGGAGAAC CCTAAGCAAT AGGCAATAAG AAGCTCGAG                                         409
```

(2) INFORMATION FOR SEQ ID NO:1090:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 359 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1090:

```
GAATTCGGCC TTGGCCTAGT GAGAGAGCGT CAAAAAACT TCCATCTCAG CCAACCACTG      60
ATACTAGTAC TGACAAAGAA AGAATTTCAG AGGACATGGC TGATAAAGAA AAATCTACAG      120
CTGACTCTGG AGGTGAAGGA CTGGAAACAG CCCCAAAGTC TGAAGAGTTC AGCGACCTCC      180
CCTGTCCAGT CGAAGAAATT AAAAATTACA CAAAAGAGCA TAATAATTTA ATTCTGTCTAA      240
ATAAGGATGT TCAACAGGAA AGCAGTGAGC AAAAAATAA ATCAACAGAC AAAGGTGAAA      300
AGAAGCCAGA CAGCAATGAG AAAGGAGAAA GAAAGAAAGA AAAGAAGGAA AAGCTCGAG      359
```

(2) INFORMATION FOR SEQ ID NO:1091:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 280 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1091:

GAATTCGGCC	TTCATGGCCT	ACATGTTT	ACAT	TCTAAGAAAC	TAACTCCAT	TTTAAAGCTT	60
TAAGATTCCC	CCGATCCCAA	ATAACCTAAC	ACACCAAAG	CCTTGCCAT	TCACACATGC		120
TGTTCTTTG	CTTAGAACCT	TTTCAATGTC	TAGCTCACTC	TGTTTGGGAC	TTCTTTTTC		180
TTTTCTTTT	TTTGAGACAG	GGTCTGGCTC	TGTCATCCAG	GCTGGAGTGC	AATGGGGCAA		240
TTTCGGCTCA	CTGCAACCTC	CGCCCTTCCA	GGCTCAAGCG				280

(2) INFORMATION FOR SEQ ID NO:1092:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 443 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1092:

GGAAAATTGA	GAAGAACATG	AAAGAAAAG	AAGAACTGTT	AAAGTTAATT	GCCGTTCTGG	60
AAAAAGAAAC	AGCACAACCT	CGAGAACAA	TTGGGAGAAT	GGAAAGAGAA	CTTAACCATG	120
AGAAAGAAAG	ATGTGACCAA	CTGCAAGCAG	AACAAAAGGG	TCTTACTGAA	GTAACACAAA	180
GCTTAAAAAT	GGAAAATGAA	GAGTTTAAGA	AGAGGTTTCA	TGATGCTACA	TCCAAAGCCC	240
ATCAGCTTGA	GGAAGATATT	GTGTCAAGTA	CACATAAAGC	AATTGAAAAA	GAAACCGAAT	300
TAGACAGTTT	AAAGGACAAA	CTCAAGAAGG	CACAACATGA	AAGAGAACAA	CTTGAATGTC	360
AGTTGAAGAC	AGAGAAGGAT	GAAAAGGAAC	TTTATAAGGT	ACATTGAAG	AATACAGAAA	420
TAGAAAATAC	CAAGCTTCTC	GAG				443

(2) INFORMATION FOR SEQ ID NO:1093:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 256 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1093:

GAATTCGGCC	TTCATGGCCT	ACCTCCATTG	TATATTAACA	TTTATCATAA	TTATTATTG	60
CTCATTCAAA	AAATATTGCT	CTGATATGGT	ATTGAATATT	CCTCACATAG	GAAAAATATGA	120
ACAGTTTATT	TGCCACCCAG	ATGGTTTGGA	AGCCTATACC	CTCCAAGACA	TTGAGAAAAG	180
AAAAATCTTT	CTCTCAGGAG	AGAGAATGAG	TGCCAAGCAA	TGGGAGAAGC	CCCTTAAAAA	240
ACCATCAGAT	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:1094:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 454 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1094:

GAATTCGGCC	TTCATGGCCT	AAGCTGTTAG	TGATTCTGAC	ACCCTTGGAC	CTCCAGGAGT	60
AGCTCCTCCT	GCCACGAGAG	GACTCTGGCT	TTTCTAATAA	GGAAGGTTCT	GGCCAATCAG	120
TCCAAGAAAG	GCCCGGATTG	TCTTCCAAGG	TGTTGTCTCT	GCAGAAATGT	TCCTCAGGGT	180
GGAAGGTGCT	GCTGCAGCAA	GGGATGTCCC	CTGAGTTTTC	AGGTATGTAG	TCTGTGGCTG	240
CAGCAGGTGA	ACACTCCTCA	CACTCCCAT	TCTTACTGTT	AGATCTAAGA	GAGGAGCAGT	300
CCCTGTGGGT	TCCGTGGGAT	CCGCATGTAG	CACACAGAAT	GAGGCACCAC	CTCCCTTCAT	360
CCTCAAAGCT	GTCTCTGCCT	TGTTCAACA	GACAGATGGG	GGCATCACAG	TGCTGATAGC	420
GCTGATATAA	GTCTGAGAAA	GCCCCTGGCT	CGAG			454

(2) INFORMATION FOR SEQ ID NO:1095:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1095:

GAATTCGGCC	TTCATGGCCT	AGTGATCTCA	TCTCTCCGTC	CATGGGCGAA	AAAACAGCCA	60
TCACCAGGCC	ATTCACGCTT	TGTGCTTTTG	TTAGCAGAGC	CCAGGCAGCC	CTGCAGCCCA	120
CATCTAGGGT	ACAAACGGAA	CGGCGGCGTT	TTCTTGTAT	CATTTAGAGG	AAATTTTGA	180
GCTGAACAGT	ATTTTTTTTC	TCCCTCTCTC	TCTCTCTGAA	ATATTGCTGA	GATTTAAAGG	240
AGGACGAAGA	CAACAGATTC	ATAGCTGGGT	CTTGCTGTTT	TCCTGACGCT	GACCACAGCG	300
GATCTAGTTT	CTCTGCAGAA	GACAGCAAGA	TGCCCCAGGG	AATGTTTGTG	AAAAAGGATG	360
ACTGGATGGG	AAGCAAGCTG	AAGAAAAAGA	AGGAAAGAAA	GAGAGAAATC	AGTAAATCAC	420
CACACAAGAG	GTGGAGAAGA	GGACTCGAG				449

(2) INFORMATION FOR SEQ ID NO:1096:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1096:

GACTGGCCGC	AAGGGACGGG	TTGTGAGCAA	TGATGATGGA	AGCATATCTT	ATGAGTCAAG	60
ATCTGAACTT	GATGTGCCTG	TGGAAATACT	AAACATCACA	GAAAAACAAC	GATTTATGGA	120
TGGAGATAAG	AATATTGCTA	TCATCTCAGA	AGTGCCATG	CTCGAG		166

(2) INFORMATION FOR SEQ ID NO:1097:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1097:

GAATTCGGCC	TTCATGGCCT	ACATTATTTA	CACCTGTCCC	AGACTTTGAT	TCAGGAAC	60
ATGCTGCAAA	GCAAGGACTA	TGATGGAAAA	TGCTCACTGC	AAGAATGGTA	GCTGCAGCAA	120
GATCAAGATC	CCAGAAAGCA	GTGGCCAAGG	CACTCACTGT	AGACTTTAGT	GCCTGCAGCA	180
TCTGGTGCAA	GCTACACTGT	CTACGCCCAG	GAACACAGCA	GCAGCATCCG	GCCTGGGCCA	240
ATTCTGTGTA	AGATTTGATG	CGCTGTCCCT	GGCTGCAGTG	CCTGCAGACA	TCTCTCTCTA	300
GCCCTTCTAA	CAATTCACA	GCAACTCAAC	ATCTTTAAAA	ATTTATTAGC	CAACCAAAAT	360
CAGCTTCTGT	GGCATGCAAG	TAAAAACCCA	GGCTGATATG	TCTGAATACA	GAAGATTTAT	420
ATTAGTTTCT	TAGAGTCAAT	AATCCATACA	GACTCTATTC	TAGCTTCTTT	GTGAAGTGGG	480
TAAGAATTCC	TCTGCCTCGA	G				501

(2) INFORMATION FOR SEQ ID NO:1098:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1098:

GAATTCGGCC	TTCATGGCCT	ACTTCAAAAA	CATATATTAA	TATTTTGTGA	CCACGTAAGT	60
TCATCAGAAG	CCTGACTTTA	ATCTCTGATT	TATTATATTT	GAACACTGTG	AAGAAGCAGT	120
TTAACACTGA	ACGAAAGTGT	CGTAATGCAG	CTTTCAAAGT	GGCCATTAAA	GACAGATCTC	180
TGCTTTTCTA	TTAGTACATT	TTCTAAGATG	ACTATCATTG	CCATTGTAGT	CAGCTTTGTG	240
TACCTTTATA	GAGATTCCAG	TATAAACCCA	GAAACGCTCG	AG		282

(2) INFORMATION FOR SEQ ID NO:1099:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1099:

GAATTCGGCC	TTCATGGCCT	AGGAACTTTT	TCAAAGAAGT	AGTCCACGAG	AACTACCTTG	60
AAAGAGCAAA	ACCAGCCAGG	TGCAGTGGCT	CACGCCCATA	ATCCCAGCAC	TCTGGGAGGC	120
CCAGGTGGGT	GGATCTCGTG	AGGTCAGGAG	TTCAAGACCA	GCTTGGCCAA	CATGGTGAAA	180
CCCCATCTCT	GCTGAAAATA	CAAAAGTTAG	CTGAAAATAC	AAAAGTGGCA	CATGCCTGTA	240
ATGCCAGCTA	CCGGGAAAGG	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:1100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1100:


```

CTCGAGCGTA TCCCAGAACT TAAAGTATAA TAATAATAAT AATAATAATA ATAATAATAA    60
TAATAAAACC TTCCAACAAG CTTCCTTTCC ACCACAGGAA ATCCTGTTGG GAGTTCCCCC    120
TGAACCAAAA AAAAAAAAAA ATAGAGTATA AACATACAC TTTTCAGGAA TGCTTATTGG    180
GTAATGTAAG ATAACACCTC AAAATGAAAC TCAGAATTTT ATTTTATTTT ATTTTGTGAG    240
ATGGAGTCTC ACCTAGGCTG GAGTTCAGTG TGGTAATCTT GGCTCACTGT AGGCCATGAA    300
GGCCGAATTC

```

(2) INFORMATION FOR SEQ ID NO:1101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1101:

```

GCGATTGAAT TCTAGACCTG CCTCGAGTGT ACCTCATTCT GCCATCTCTG ATATTATGTC    60
ATCTGATCAA GAAACTTACT CTTGTAAACC TCATGGACGG ACTCCACTTA CCTCAGCTGA    120
TGAGCATGTA CATTCCAAAC TGGGAAGGAAG TAAAGTAACG AAATCTAAGA CTTCTCCGGT    180
GGTATCTGGT TCATCTAGTA AATCAACCAC CCTTCCAAGG CCACGACCTA CCAGGACTTC    240
CCTCTTGCGC AGAGCACGAC TTGGTGAAGC TTCAGACAGT GAACTTGCTG ATGCTGACAA    300
AGCATCTGTT GCTTCTGAAG TATCCACAAC AAGTTCTACA TCAAAACCTC CCACAGGAAG    360
GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1102:

```

GAATTCGGCC TTCATGGCCT AAGAAAGCAA GAAAGCACGA AAGCAATCAA GCAAGAAAGC    60
AAGCAGGAAA GAAACAAAAG AAAGAAAGAA NGCGAGAAAA CAAGAAAGCA CGAAAGCAAG    120
CAAGCAAGAA AGCAAGCAAG AAAGAAACAA AAGAAAGAAA GAAAGAAAGN AAACAGGAAA    180
GCAAGAAAGC ACGAAAGCAA GCNAGCAAGC AAGAAAGCAA GCAAGAAAGA AACAAAAGAA    240
AGAAAGAAAG AAAGAAAGAA AAAGAAACA GGAAGCAAG AAAGCACGAA AGCAAGCAAG    300
CAAGCAAGAA AGCAAGCATG AAAGAAACGA AAGAAAGAAA GAAAGCAAGA AAACGGGAAA    360
GACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1103:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1103:

```

GAATTCGGCC TTCTGGCCTA GAAACCCGTG ACACACACAC ACACACCTGC ATAGATTTT    60
CCCAAGCACA CGATATGCAC GTGGATACAC AGACTTACAA GCACAGGGCC ACGTGCAGAC    120
AGACACAGAC CCTGTCTGCA CCACAAACAT ACCACACACA GCCACACACA CAGAAGCCAA    180
ACATCCTCGC ATAGGTGGAT ACAAGCACAG ACTCACATAC ACATATGCGA TACACATATG    240
GATACATACA CAGAGTACCC CCACAAACAC ACAGACACAC ACGGGCAGAG ACAGACAGAG    300
ACAGGCACAG ACCCCCCCCC ACCTCGAG                                     328

```

(2) INFORMATION FOR SEQ ID NO:1104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1104:

```

GAAAAAACT GAGTTAATGG CCATGACTAG ATGGGAGGTC AGATTCGCCG TTATATCCTC    60
TCTGTTTTGC AGTTTAGACA CAACTGACCA GCATTGTTAA AATGGAGATC ATACGGCTGG    120
TAGAACAGAC TCTTTGTGGC CCAAAATTAG CAAATTATAA ATAGAATCTA AAGCCATCCC    180
AGGCAAGGGT TAAGTTATGC ACCCCTACAC TTAAAGAATA AACTATGTTG GCCGGGCCAA    240
CTCGAG                                     246

```

(2) INFORMATION FOR SEQ ID NO:1105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1105:

```

GAATTCGGCC TTCATGGCCT ACGATCAGAA AGAAAACACA GATCTCGAAG TCGGGATCGA    60
AGAAGATCAA AAAGCCGGGA TCGAAAGTCA TATAAGCACA GGAGCAAAAG TCGGGACAGA    120
GAACAAGATA GAAAATCCAA GGAGAAAGAA AAGAGGGGAT CTGATGATAA AAAAAGTAGA    180
GAAAGAAGGC GGAGCAGAAG TAGAGATCGA CGAAGAAGCA GAAGCCATGA TCGATCAGAA    240
AGAAAACACA GATCTCGAAG TCGGGATCGA AGAAGATCAA AAAGCCGGGA AGCTCGAG    298

```

(2) INFORMATION FOR SEQ ID NO:1106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1106:

```

GAATTCGGCC AAAGAGGCCT AGGGATGGAT GGTTCACTG CTAGAATTC GATGCAGGAC    60
TTCTTCAAAA TTGAGTGGAT GATGCCTTGC AGAGCCTGAA AGCCGTCATT CACGGGAAAC    120
ACATGATCCT TACTGTCCGC AATCCGGGCC AGCTGTGTCT CATTGAAATC TTTACACCA    180
ACACAGTAAA CAATTGCACC AAGATCTCGA G                                     211

```

(2) INFORMATION FOR SEQ ID NO:1107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1107:

```
GAATTCGGCC AAAGAGGCCT ACCTGCTTGA ATTGGGGCCC CTTGTGAAGC TGCTGCCGCA      60
TCTCTTCCAT TCGCTGCTTC CGGTACTGCT GCAGAACTC TTCATCATCT TGGTCCTCAT      120
TCATTATGGC AAATCCTTC AGAGTCATCT TCCCACTGAT CTTCTCCTGG AGGTCTTTCT      180
GTTTCTGTTG CTCCTCCTCT TCATCCAGAT GGGACCTGCA AGTCATTGAC AGCTTCTTGA      240
TCAGCCTTTC CATCTCCCGG CAACTCGAG                                         269
```

(2) INFORMATION FOR SEQ ID NO:1108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1108:

```
GAATTCGGCC AAAGAGGCCT ATGAAAATTG ACTGCAATTA GTAAAGTTGG TATAACGTAC      60
GTTCCAGTT GTGCTATTTA GAATTATGAT AGTATTATGC TCCTACTTTT CTTTGATATT      120
GAGTAGTCTC GAG                                                         133
```

(2) INFORMATION FOR SEQ ID NO:1109:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1109:

```
GAATTCGGCC AAAGAGGCCT AGCTTTTCT AATCATAAAT TATATGACCT TTACAGAAAA      60
TTTAGAAAAT ACAGAAAAAC TGAAAAGTTA CACATGGTAC AACTCACAAC CACAATCCTC      120
GAG                                                                      123
```

(2) INFORMATION FOR SEQ ID NO:1110:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1110:

GAATTCGGCC AAAGAGGCCT AGTGTTCAG ATCCTACGGC TTATGAGGAT TTTCCGAATT	60
CTAAAGCTTG CCCGGCACTC GGTAGGACTT CCGTCTCTAG GTGCCACACT GAGACACAGC	120
TACCATGAAG TTGGGCTTCT GCTTCTCTTC CTCTCTGTGG GCATTTCAT TTTCTCTGTG	180
CTTATCTACT CCGTGGAGAA AGATGACCAC ACATCCAGCC TCACCAGCAT CCCCTCGAG	240

(2) INFORMATION FOR SEQ ID NO:1111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1111:

GAATTCGGCC AAAGAGGCCT AGGTGGGGAG GGGAGGGGAC AGGAGAAATG AAATACCTTC	60
ACCGAGAACT CAGCAGCTGC CACCGCAGCT GCCTCCTCAG GATCCGGTCG TCGGGGATAG	120
GGAAGGGAGG GGAAAGGGGA ACGGAAAACA AAAAAAGGG GGAGGGAAGG GGGAGGAAGG	180
AGTCGGGGAC GGCCTCAAAC TCAGCTCAGA GGAGTCGCTG CTGCAGCCGC CACTCGGTAC	240
CCGCTGCTAG GCCTCTTTCG CGAG	264

(2) INFORMATION FOR SEQ ID NO:1112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1112:

GAATTCGGCC AAAGAGGCCT AAATATTAGA AAATGTATAT TATAGAACAT GATATATATT	60
TACATTCATC TCTGTATTCT CTCAGCTGTT GTTAGAAGGA CAGAATGTTA AACTTTATCT	120
TAATTAGTAT ACTAGAAAGG GCAGTATAAT ACTGTTTAA AGTGAAGGCA TGACTGAAAC	180
TAAAAATTTT CATAAGGCTT AGCTAGAGGC AGAGTAACGT GTTTTGTTC ATTGGGCTTC	240
CTTGACTTGA GTTTTTCAT TTAATAATTC AAACCAACAC TTTTAAAAAA ATAATTCAGA	300
TGAGACTGAG CCATATCTGC AGTAAGAGAA ATATTTCTTA ATGTTTGGT TACTTATGAT	360
AGAGTACTTT TCTTGATACT GTTAACCTTG TGCTTTTAA AAAAAAGTGAT TCTCTAACAG	420
ACCTCTTAAA TTGTGACATG AAGGTATGTA ATTAGATTTC AGAAATTGGT TTATTAGTGA	480
GGAATTTTGA TCAATAAATG TCATGGGGCG GCGCTCGAG	519

(2) INFORMATION FOR SEQ ID NO:1113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1113:

```

GGCCACCTA GTTGGTATCC CAAATTCACA CATTCAAAG CAAAGCCATT TCTCACCTTC      60
CTCCAAAATA CTTGTAATTC CTAATATCCT GACTCCAATC CATTCCTTAT TTTCTATTCC      120
CAAGGCCCTT CACAGAATCG AAACCTTTGT TATGAGCTCT TACATGGTGT ATCATCAATA      180
TGTTCACTAG ACAGGAGTTT TTTTAAAAA AAATCCTCAT CATTCCTCTT CAATTCAAGA      240
GCTCTGATGG CTTCCAGTCT ATACAAGATA TATTAAGGCT CAACTTACAG TTCCAGTCTC      300
ACCTGCCCCA CCTCCACCTT CCCAAACCCT CTGTATTCTA GCCAGAGCAT ACCTGCATTTC      360
CCTTAGCTCA ACATGTGTCC TTGCTCACAC TGTCCCTTTG GTTGACCTAG CTTCAATTCC      420
TTCCTCATGT GCAGTTATGT GTCTACTAAG CAGCAATGTG AAATGTCTTT ATTGTAGGTC      480
TGTCAAAAGC TAAAGTCATG GCCCGGTGCA GTGGCTTGGG CCTGTAATCC CAGCACTTTG      540
GTAGGCCTCT TTGGCCGAAT TC

```

(2) INFORMATION FOR SEQ ID NO:1114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1114:

```

GAATTCGGCC AAAGAGGCCT ATTATTGCTA TCGCCCTCCT TTCCCTTATT GCCTCCAGG      60
CAAGCAGCTG GTCAGTCTTT GCTCAGTGTC CAGCTTCCAA AGCCTAGACA ACCTTTCTGT      120
AGCCTAAAC GAATGCTCTT TGCTCCAGAT AACTCTCTT CCTTGAGCTG TTGTGAGCTT      180
TGAAGTAGGT GGCTTGAGCT AGAGATAAAA CAGAACTCTC TGGGTAGTCC CCTGTGTATT      240
ATCTTCAGCC CAGGCTTTTG CTAGATGGAA TGGAAAAGCA ACTTCATTG ACACAAAGCT      300
TCTAAAGCAG GTAAATTGTC GGGGGAGAGA GTTAGCATGT ATGAATGTAA GGATGAGGGA      360
AGCGAAGCAA GAGGAACCTC TCGCCATGAT CAGACATACA GCTGCCTACC TAATGAGGAC      420
TTCAAGCCCC CTCAG

```

(2) INFORMATION FOR SEQ ID NO:1115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1115:

```

GAATTCGGCC AAAGAGGCCT AGTGCCTAGA TTGATCGGTA TAAGGCTCAC TCTCCCGCCC      60
CCCAAAGTGG TTGATCGTTG GAACGAGAAA AGGGCCATGT TCGGAGTGTA TGACAACATC      120
GGGATCCTGG GAAACTTTGA AAAGCACCCC AAAGAACTGA TCAGGGGGCC CATATGGCTT      180
CGAGGTTGGA AAGGGAATGA ATTGCAACGT TGTATCCGAA AGAGGAAAAT GGTGGAAGT      240
AGAATGTTCT CTGATGACCT GCACAACCTT AATAAACGCA TCCGCTATCT CTACAAACAC      300
TTTAACCGAC ATGGGAAGTT TCGATAGAAG AGAAAGCTGA GAACTTCGGA AAAGGCTCAT      360
CTGTCAACCT GGAGAAGGGA AACTGTACTT TTCCCTGTGA GGAAACGGCT TTGTATTTTC      420
TCTGTAATAA AATGGGGCTT CTTTGAATT TGATAAGCCT AGGCCTCTTT GGCCGAA      477

```

(2) INFORMATION FOR SEQ ID NO:1116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 620 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1116:

```

GAATTCGGCC AAAGAGGCCT AAGATGAAGC CCAACATCAT CTTTGTACTT TCCCTGCTCC      60
TCATCTTGGA GAAGCAAGCA GCTGTGATGG GACAAAAAGG TGGATCAAAA GGCCGATTAC      120
CAAGTGAATT TTCCAATTT CCACACGGAC AAAAGGGCCA GCACTATTCT GGACAAAAAG      180
GCAAGCAACA AACTGAATCC AAAGGCAGTT TTTCTATTCA ATACACATAT CATGTAGATG      240
CCAATGATCA TGACCAGTCC CGAAAAAGTC AGCAATATGA TTTGAATGCC CTACATAAGA      300
CGACAAAATC ACAACGACAT CTAGGTGGAA GTCAACAAC TCTCCATAAT AAACAAGAAG      360
GCAGAGACCA TGATAAATCA AAAGGTCATT TTCACAGGGT AGTTATACAC CATAAAGGAG      420
GCAAGCTCA TCGTGGGACA CAAATCCTT CTCAAGATCA GGGGAATAGC CCATCTGGAA      480
AGGGAATATC CAGTCAATAT TCAACACAG AAGAAAGGCT GTGGGTTTAT GGAATAAGTA      540
AAGAACAAAC TTCCGTCTCT GGTGCACAAA AAGGTAGAAA ACAAGGCGGA TCCCAAAGCA      600
GTTATGTTCT CCAAACTGAA

```

(2) INFORMATION FOR SEQ ID NO:1117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1117:

```

GAATTCGGCC AAAGAGGCCT AGACCTGCCA CATTGTGTTAA CATTTTTCCA TTTCTAAACC      60
ATCCTTAAAG AAAATCATAT ATGGGGTCAC ACCATCCTCA CGGTAGTCCA ATAGAGCAAC      120
CATGCCATCT GGATTCATGT TTTCACCAAA CCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1118:

```

GCACTGCTTC TGTAAAGTC ACTGACCTTA ACAGTTTAGA ACTAGATAAA GGAAATTTTG      60
TGTTTGACCA AATGTGTGAA ATAGGTAAGC CAGAACCATT GAATGAGGAG GAAGCAAGGG      120
GTGTGGTTGA GAATTATAAT GATGAAGAAG TGTCAATTAG AGTTGGTGGA AATACACAGC      180
CAAGTAAAGT TTTGAACAAA AAAAATGTAG AAGCTATTGG ACTTCTTGGA GGACAAAAGA      240
GCAAAGCAGA TTATGAGCTA TACAACAAAG CCTCTAATCC TGATAAGGTT GCTAGTACAG      300
CGTTTGCTGA AAATAGAAAT TCTGAGACTA GTGATACTAC TGGGACCCAT GAATCTGATA      360
GAAACAAGGA ATCCAGTGAC CAAACAGGCA TTAATATTAG TGGACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1119:

```

GAATTCGGCC TTCATGGCCT AGTTGCCCTA ATTTGCAGCC GAACTTGGA GGCCTGTAT   60
CCAATGGACC TTTTCTGCAG CTTTCTTCCC AGTCTCTTAG CCATAATGTT TTTATGTCCA   120
CCAGTCCTGC ACTTCATGGG TTATCATGTA CAGCAGCAAC TCCGAAGATA GCAAAATTGA   180
ATAGAAAACG ATCCAGATCA GAGAGTGACA GTGAGAAAGT TCAGCCACTT CCAATTTCTA   240
CCATTATCCG AGGCCCAACA CTGGGGGCAT CTGCTCCTGT GACAGTGAAA CGGGAGAGCA   300
AAATTTCTCT TCAACCTATA GCAACTGTTC CCAATGGAGG CACAACACCT AAAATCAGCA   360
AAACTGTACT TTTATCTACT AAAAGCATGA AAAAGAGTCA TGAACATGGA TCCAAGAAAT   420
CTCACTCTAA AACCAAGCCA GGTATCTCG AG                                     452

```

(2) INFORMATION FOR SEQ ID NO:1120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1120:

```

GAATTCGGCC TTCATGGCCT ACATGAATCT ACTTCTGATC CTTACCTTTG TTGCAGCTGC   60
TGTTGCTGCC CCCTTTGATG ATGATGACAA GATCGTTGGG GGCTACATCT GTGAGGAGAA   120
TTCTGTCCCC TACCAGGTGT CCTTGAATTC TGGCTACCAC TTCTGCGGTG GCTCCCTCAT   180
CAGCGAACAG TGGGTGGTGT CAGCAGGTCA CTGCTACAAG TCCCGCATCC AGGTGAGACT   240
GGGAGAGCAC AACATCGAAG TCCTGGAGGG GAATGAACAG TTCATCAATG CAGCCAAGAT   300
CATCCGCCAC CCCAAATACA ACAGCCGGAC TCTGGACAAT GACATCCTGC TGATCAAGCT   360
CTCCTCACCT GCCGTCATCA ATTCCCGCGT GTCCGCCATC TCTCTGCCCA CTGCCCCTCC   420
AGCTGCTGGC ACCGAGTCCC TCATCTCCGG CTGGGGCAAC ACTCTGAGTT CTGGTGCCGA   480
CTACCCAGAC GAGCTGCAGT GCCTGGATGC TCCTGTGCTG AGCCAGGCTG AGTGGAAGC   540
CTCTACCCT GGAAAGATTA CCAACAACAT GTTCTGTGTG GGCTTCCTCG AG                                     592

```

(2) INFORMATION FOR SEQ ID NO:1121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1121:

```

GAATTCGGCT TCATGGCCTA AATAATTTT ATTCAAGAATA ATAAATCACT CTTTATCATA   60
GTATCTTCTC TTCCCTCTTC CCCTTTAGTT TGGATAGCCT AACTCTGAGA AGTTAACCCCT   120
TAAACAGTTT TCTGGAAGAG ACTGAATTTC TGGGTCCTTG CAGCTGTGAT GGTTCAGAG   180
CTCAGACTGA TCAGGCATCA AGCTACCTC AAGAGTTTCT GGGCTGGATG TTTCAACA   240
ACATCTACAC CAGTAAAGTG TAATAGGTCA GTTTCAAAAC GACCAAAAGA CCCCACCACT   300
CGAG                                     304

```

(2) INFORMATION FOR SEQ ID NO:1122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1122:

GAATTCGGCC	TTCATGGCCT	AGTGAACTC	CATTTTTTTA	CTGCTATTAC	TCTGTGTTTT	60
CAGTTTTATG	ATTGGAATA	CCATGATGGG	AACATCTATA	CTAAGCATTG	CTTGGGGCAT	120
AAAACAGGCT	GGATTTACTA	CTGGAATGTG	TGTCATCATA	CTGATGGGCC	TTTTAACTG	180
TTATTGCTGC	TACAGAGTAG	TGAAATCAGG	GACTATGATG	TTTTCGTTGG	ATACCACTAG	240
CTGGGAATAT	CCAGATGTCT	GCAGACATTA	TTTCGGCTCC	TTTGGGCAGT	GGTCGAGTCT	300
CCTTTTCTCC	TTGGTGTCTC	TCATTGGAGC	AATGATAGTT	TATTGGGTGC	TTATGTCAA	360
TTTTCTTTT	AATACTGGTA	ACCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:1123:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 478 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1123:

AGCAATTCCA	TAAACACATC	CTGGTGCAT	CACAGCCAAG	GTTTTAGGT	TGCTATACCA	60
ATGGCTTATT	AAATGAAAT	GGCACTAAAA	GTTTCTTGAG	ATTCTTTATA	CTCTCTGCCT	120
TCAGCAATCA	ATTCCATTCA	TACATCAGCA	CTCTGCTGGT	TCTGTTTGAA	ATATGTTCTG	180
TATTTAAAC	TCAAATCTTG	TTGGATCTCT	GCAGGGCTTG	TGACCAATGA	AGTCATATTT	240
GTTGATGGTT	GACAAAGCTT	GCTTCACTCC	ATCAGAGAAT	GACTATCAAT	TTTTTTTTAA	300
CTGTCTATC	ACGTCCTCTC	CTGTCACCCA	TTTTGAAGAG	TGGCAGAACT	TGAAGTTCAA	360
CTTCCTCTGT	AAATATCCAA	GTATAAAGCC	CAGGAACTTC	TAGAATAACC	CAGATGCGCT	420
TTAATTTTTT	TTAATATGTT	TTGATCACAG	AACTCCTTAG	GCCTCTTTGG	CCGAATTC	478

(2) INFORMATION FOR SEQ ID NO:1124:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 450 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1124:

GAATTCGGCC	AAAGAGGCCT	AGGAATTCAG	TGCAAACT	ACTTTGAACT	GTGGTTCCCTA	60
ATTTCCACGA	AAGTTTTTCT	CTGTTCTTCT	ATTATGGCAC	TTTTCAGGGT	CTCCCTTGTA	120
CATTTTAGTT	TTTGTGTTTT	TCAGTAAGTG	CCTTGAGATC	AGGGACCGGT	TCTACTGGTC	180
TGTTCCAACC	ATAGTTCCTT	AAACATTGTG	TTCCATTAA	ATTGGGTGAA	TTGAAATGAA	240
TTTATAGGAA	GCTCCTTAAC	CTGGGGTCCT	CAGACCTCTA	TGGGGTCCAT	GGACAGAATT	300
TGAAGTGGA	AGGATATATG	AAGTTGGATG	GAGGAAAT	ACTTATTTGT	TTTTTACCAA	360
CCTCTCCTTT	GTAATTTAGC	CATTTGTTCA	ATTATAATGT	AGGCAAATAA	AAATAAAAA	420
AAAAATAAAA	TAAAGGCAGC	TTAGGCCTCT				450

(2) INFORMATION FOR SEQ ID NO:1125:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 550 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1125:

```

GAATTCGGCC AAAGAGGCCT ATCCTTAGTG GATTCCGACT TCCATGGCCA CCGTCCTGCT      60
GTCTATATCA ACCAACACCT TTTCTGGGGT CTGATGAGCG TCGGCATCGG GCGCCTTAAC      120
CCGGCGTTTC GTTCATCCCG CAGCGCCAGT TCTGCTTACC AAAAGTGGCC CACTAGGCAC      180
TCGCATTCCA CGCCCGGCTC CACGCCAGCG AGCCGGGCTT CTTACCCATT TAAAGTTTGA      240
GAATAGGTTG AGATCGTTTC GGCCCCAAGA CCTCTAATCA TTCGCTTTAC CGGATAAAAC      300
TGCGTGGCGG GGGTGCCTCG GGTCTGCGAG AGCGCCAGCT ATCCTGAGGG AAACCTTCGGA      360
GGGAACCAGC TACTAGATGG TTCGATTAGT CTTTCGCCCC TATACCCAGG TCGGACGACC      420
GATTTGCACG TCAGGACCGC TACGGACCTC CACCAGAGTT TCCTCTGGCT TCGCCCTGCC      480
CAGGCATAGT TCACCATCTT TCGGGTCCTA ACACGTGCGC TCGTGCTCCA CCTCCCCGGC      540
GCGGCGGGCG

```

(2) INFORMATION FOR SEQ ID NO:1126:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1126:

```

GAATTCGGCC AAAGAGGCCT AGTTTGCAGG AAGAAGGCAT GGGATAGTCT GAGAACAAAC      60
AGGCACTAAA TGGAGCAACA TCATCTTGAG GTGTCAAGCA GGAGCTGGGA GACCAGCAGA      120
GACTCCCAAG GCCTTGCTGC TGTGGTCTG CAGGCAGCTC TGTAGGGCAG GCTGTTGTCA      180
TTTTGCAAGT GAGCAAGCAG AAGCCCAGGC AGGTGAGTCA TTCACTCCAC AGTTCATAAC      240
TTGGATTGTG GGTTAGTTAC ACCTGACTCC AAAACTTGAC TTTTACTAC TCAGCTATAC      300
TGGCCTCTCA AGAAAGGCTA GGCCCTAATT TCTAGACTCT CTTTACCAA TAATACCTGT      360
TGCCACGAAG TAGGCCTCTT T

```

(2) INFORMATION FOR SEQ ID NO:1127:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1127:

```

GAATTCGGCC AAAGAGGCCT ACTCTCAAGG TGGGCATATG CAAAACATAA TCTCTAAATT      60
CTTCAATACT AAGAAATACC TTTGTTTAC CCTAAAATC AAATGCCATT TTGGCTGGAT      120
ATAGGATTCT AGGATTAAAG CCTTTTCCA GCAGAACTTT GAAGACATTG CTCCTATTAC      180
TTCTAGCATC CAGTGTGTCC AGTGATAAGT CTGCTGTCAA CCTGATTCTT GTTCCTTGGT      240
AGGTAATTTT TCTTCTCTCT CTAGAAGCCC TTATTATTTT CTCTTTATCA CTAGAATTCC      300
AAAATTTTAC CAAGATGTGT CTAGGAGTCA GTCTCTTTTC ATCAATTTTA CTAGGTACTC      360

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361

(2) INFORMATION FOR SEQ ID NO:1128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1128:

```

GCAGCCAATG GCGGCGCCAG AGGGGAAACN GAGCCTTGCT NACGGGCCCCA ACGCTGGGGA      60
GCAGCCAGGC CAGGTGGCGG GCGCAGACTT CGAGAGCGAG GACGAGGGCG AGGAATTTGA      120
TGACTGGGAG GACGACTACG ACTATCCCGA AGAGGAGCAG CTCAGTGGTG CCGGCTACAG      180
AGTATCAGCC GCTCTTGAAG AAGCCGACAA GATGTTTCTG AGAACAAGAG AACCAGCCCT      240
GGATGGCGGG TTTCAGATGC ATTATGAGAA GACCCCGTTT GATCAGTTAG CTTTATCGA      300
AGAGCTTTTT TCACTGATGG TTGTCAATCG TCTGACCGAA GAACCCGGCT GCTCTCGAG      359

```

(2) INFORMATION FOR SEQ ID NO:1129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1129:

```

GATGGCACCC TCCTCAGAAA GCAGCGTCCC CTCTCACAGT ATGTCCTCCC GACGGGACAC      60
AGACTCGGAT ACCCAGGATG CCAATGACTC AAGCTGTAAG TCATCTGAGA GGAGCCTCCC      120
GGACTGTACC CCTCACCCCA ACTCCATCAG CATCGATGCC GGTCCCCGGC AGGCCCCCAA      180
GATTGCCCAG ATCAAGCGCA ACCTCTCCTA TGGAGACAAC AGCGACCTTG CCCTAGAGGC      240
GTCCTCGCTG CCCCCACCGG ACCCTGGCT CGAG                                274

```

(2) INFORMATION FOR SEQ ID NO:1130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1130:

```

GGCTTTCCAC CTTCCCTGCG GAGATGAGGG TGSTGGCCTC CTTTTTGTG ACCCTTCCAA      60
GGGTCATGCT CGTCTGCTGG CTTTCTCCA AGATGCTGCC AAAAATGATC TTAATAAGAC      120
ACAAGCCTGG TTGTGATATT TTCCTGATTC AAGTGTCTCT GTGGTTCTTG GTTGCCCTCA      180
GGAGAGAGTT CAAGCCTCTT ATGGTGGTTT GTGAGGCCAG GCCTGAACTA GCCCCATCGT      240
CTGTTTATTC ACCACCCAG TATCCCTGCT GCAGGTTTTT AAAGATCTCA TGTCCCTGAT      300
TGCCTGTCAC TGTGTCTGAC TCGAG                                325

```

(2) INFORMATION FOR SEQ ID NO:1131:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 639 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1131:

```

CTCGAGGATC CCCGGGGACG GGACGGGCCG GGGCTTGGAG GGGGGTCGGC TGCCACAGGC      60
TCACATCACG GCCTCCATAT GCAGGATCCT CAGGGCCTCG GAGATCTGCG CGTGGGGGTC      120
CATCTGGCCG TACATGCCCA CCAGGAAGGC CCGGTGGAGC AGCACAGCCG CGTGCTCTTG      180
GCACAGGAGA GCGTACTCAG GCAGGTTCCG GAGGGCCGTC TGCACCACCT CAAAGTCCTG      240
GCTGCCCAGG CAGTACATGA ACGTNGGGCA GGAAAGCGGC TGCAATGCNG GGGGCTGTCT      300
GCATGGAGCG CAGGGCCAGG CTGAAGGCGA GGTTCGGGCA AACTCTCTCG GCCGAGCTCA      360
TCAGCCGCTG CAGGTTGGTC GAGAAGAAGC TCAGGATCTC GGTCTCCGC CGGGACATCT      420
CGTCTATGTC ACTCAGAACC TCCAGCAGAT CCTCCACCGT TTGGCCCCGG GAAAGCCGTT      480
TCATGTAGGG GGCCATCTCG GCCGCGGTCA GAGGGGTGAA CAGGGAGACG CTGACCAGGG      540
GCAAGGAGCC GGCTGAGCTC TCCTCCTCGC CCTCTTCGTC CAGGCCTCGG TCGGTCCTGT      600
CGTCCCTGCT GGGCAGGCTG AGCCCTGCAA GGAGGGATC      639

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(2) INFORMATION FOR SEQ ID NO:1132:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1132:

```

GGTCTGTGGT CTTGGAGGCT TAAATTGTAA AATACATCCC TTATGGAATC CTAAATTCCT      60
CTAGGTGTTT TTGGAAGGCG CATTGAGGCC TTGTGAGCTA AAATGGAATG GATTTAATAT      120
TTCCTATCTG GCATTTCCAT CTTGCCCCTG GTACACAAGT CACTGGCCCTG GAACTCAGCC      180
TTGATTCACT GTCGTCCTTC ACGGATTAGC TGTGCTGTTA TGTGTCTGT GCTGCAGATT      240
GGCCCATGTG GGAAGTCGGG GGGGACCTGA TTTCCTGCTT GGAAGACTTG GGGGACTGCC      300
GAGCATATCA AAGTGTATTAT AGTCACCAAG TGAAGTCAG CACAACCATC TCCTCTCCAG      360
CAAGCCCTGA AGTCAGTAGT GCCTGCAGGT GAAACCAACC AGCCCTGTGT TAGAGGAGGA      420
AAAGCGGAGA TGACGTGGAA GTCTCGAG      448

```

(2) INFORMATION FOR SEQ ID NO:1133:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1133:

```

GAATTCGGCC TTCATGGCCT AGGGCTATGG CCGGAGCTTG AGATACGCCG CTCTGAATCT      60
TGCCGCCCTG CACTGCCGCT TCGGTCACTA TCAACAGGCA GAGCTCGCCC TGCAGGAGGC      120
AATTAGGATT GCCCAGGAGT CCAACGATCA CGTGTGTCTC CAGCACTGTT TGAGCTGGCT      180
TTATGTGCTG GGCAGAAGA GATCCGATAG CTATGTTCTG CTGGAGCATT CTGTGAAGAA      240

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GGCAGTACAT TTTGGGTTAC CGAGAGCTTT TGCTGGGAAG ACGGCAAACA AGCTGATGGA 300
 TGCCCTAAAG GACTCCGACC TCCTGCACTG GAAACACAGC CTGTCAGAGC TCATCGATAT 360
 CAACATCTCG AG 372

(2) INFORMATION FOR SEQ ID NO:1134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1134:

GAATTCGGCC TTCATGGCCT AGCTGGTTCT TTTATTTTGG TGTCTCAGGG ATGTAAAAGA 60
 TTTTGTAGTC ATAATATTAA ATGGCAAAAT CAAATTTCCTT AACAAATATAC AAAATAAAAT 120
 CCCATTTACA AAGGGAAAAG GCTTTATCTA TTTGTATATC TTCTTATATG TATATAAAAT 180
 CATAGAAAAC TATCTGGAAG TGTATGTAGC AAAGCATTAA CAATGGTTAT CTCTGGGTAT 240
 AAGAAGGAAC TAGAACTGAA GAAGATGGTG GTGATAAGGG AAGGTATACC TTTCTTTTTT 300
 TTTTATTCTG CTGTGCTTGA GTTTTAAAGA ATGAGAATAT TCATGTATTC CTTGTATAAT 360
 TATAACACAG AAAACCTCCT TATTAGGAAT AGGAGGCTGA TTTCTTTTTT AATGACTGAT 420
 CTTAGGTCCT TTTTGGGTAT TTCTCCCTCG AG 452

(2) INFORMATION FOR SEQ ID NO:1135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1135:

GAATTCGGCC TTCATGGCCT AGGAGGAGGG AAGGATTGGG AGCAGTGGGG TGTGAGTGGG 60
 AGAGGAGGTA GGGAACCAGA TGGGGAGAAT CGAGCCAAGT TCTGGGTTGG AGGAAACTTT 120
 CTTATTTAAC TGAGCTGGTG GGTACATAT CTAATGTTGC AGGTGATGAA TACAGGCTGG 180
 GGTAGCCGTC TAAATCCACC GAAAGAAGTA AATGAAAGTG GTTCTTGTA GGTGAAAGG 240
 TCAAGGTAAA TGGCTGTTT TTAGGAAACA ACTGATCCTC GAG 283

(2) INFORMATION FOR SEQ ID NO:1136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1136:

GAATTCGGCC TTCATGGCCT ACTGGAGACT TGTAATTAGT CTAAGCATAA TATGATTAGG 60
 TGGATGAAAT ATTTTGGAGT TTGGTTTGT TTTAAATGTA AATACTCATG AAAAGTAAAA 120
 CATACTGCAC TGTGTCCCTG GGAATATTTT TGTTATCTTT AAAATACTCA GTATTATAGG 180
 CATTATTAA CACAGCCTTA CATTGCCCCG GTTTGACCTG GAGGCCGAAA TGAATTGTGA 240

CTTATGTCCC AGCTGGGTCT CGAG

264

(2) INFORMATION FOR SEQ ID NO:1137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 653 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1137:

GAATTCGGCC	TTCATGGCCT	ACCACGTTTC	CTCACCTGTA	AAATGGACAC	TGCAGCTATG	60
TCTGCTGTTT	CACATTGTTG	ATAGAACTGG	ATGCTGTGGT	GACATTTGGG	ACACTATCAT	120
GGTGCTGGG	GTGGGTGGG	GCCCAGGCCT	GTGGGCTTCT	GTCTTTCATC	AAAGAACTTC	180
AGATCCCAGA	AAATTAAGAT	TCTCAAAACA	TAACTGTCGG	AAAGGGCTTT	TGAATCCACC	240
TTGGTGGCCT	CTTCCTGCCT	CCAGGGCTCA	TGAGATAGGC	TGACTTCATA	TGAAAGTTTT	300
GAGGATGAGG	AAGTCTCTCT	CCTCTTCAGA	TACTGACCCT	CTCTCTCCTT	ATTTCCCTTGG	360
TGCCCAGAAT	AGGGCTTTGG	TTATCTTGAA	TGAATGAATA	TAAACTCACA	GGTGTGATCT	420
GAGCCACCTA	AAGCCCTCTT	TGGGTTCTGC	TCAGCTTGAG	GGCATCACCT	AAAGGCCACT	480
GGCTGCATTT	TCCAGGAGGT	GTTTCTTAAG	CTGTATCTAT	ATAGGAATGG	GGAGGAAAGC	540
TAAGTCATTG	TAGACTGAGA	GAAAGGGAAT	AAGAGTCTGT	TCCAGACCAG	CTAGGGCTGA	600
CAAGCTTAGG	CAGCTGGGGG	CAGAGGGCAC	TGAGAATGAG	GCCCTAGCTC	GAG	653

(2) INFORMATION FOR SEQ ID NO:1138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1138:

GAATTCGGCC	TTCATGGCCT	ACAAAAGGTT	CTTGATGACC	ACCACAATCC	TCGCTTAATC	60
AAAGATCTTC	TGCAAGACCT	AAGCTCTACC	CTCTGCATTC	TTATTAGAGG	AGTAGGGAAG	120
TCTGTATTAG	TGGGAAACAT	CAATATTTGG	ATTGCCGAT	TAGAAACTAT	TCTCGCCTGG	180
CAACAACAGC	TACAGGATCT	TCAGATGACT	AAGCAAGTGA	ACAATGGCCT	CACCTCAGT	240
GACCTTCCTC	TGCACATGCT	GAACAACATC	CTATACCGGT	TCTCAGACGG	ATGGGACATC	300
ATCACCATTG	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:1139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1139:

GAATTCGGCC	AAAGAGGCCT	AGTTAATACT	TATTTTATTT	TCTGTTTTTA	TCATCTAGTC	60
AACTCGCAA	CTCCAGCAT	TTGTCTAAAT	CTACTCAATA	TATTCCAGTA	CATCAGATAA	120

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TATATCAGTT TCATCCTCCT GAAAACTCT TTTCCAGTGT ATCCTGACCT GCTCTAATTT 180
TGACTTGATG CTTTCTGTAT CTGGTGCACA GCTGTTACCT TGGAACTCTC CCTTCATCAT 240
TATTCAGAGT GTTTCGTAG TTTTCTCTT GCATTGGATT TTGTGCTTCC TGAATCCTCT 300
CGAG 304

```

(2) INFORMATION FOR SEQ ID NO:1140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1140:

```

GAATTCGGCC AAAGAGGCCT AGGGTTTGT TTGGTTTGGT TTTAGTTTTT TGTGGGAGAA 60
TTAAGATTTT TTAAGAGATA TTTTCAGATT TTTCTGTTGT CAGTTTGGT AATTGTGTGTC 120
TTTAGGAAA ATTTCAATTC ATCCAAGTTG TTGGATTAT TGGCATAAAA TTTTCAGAA 180
TATTCCTTTA ATATCCTTCT AATGTCTGTA GAATCTAATC TGTATTGCAG TCTCTTCATA 240
TTGGTAATTT GTGTTTTTTC TATTTTTTCC TGGATCAGTC AGTCTAGCTG GGGAGAACTC 300
GAG 303

```

(2) INFORMATION FOR SEQ ID NO:1141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1141:

```

GAATTCGGCC AAAGAGGCCT AGTAGCTTAG TTATTGTTTA CTTTGAAGCC CTTTGCCTC 60
TACTCTCTCC CATATATCTT CTCCTGACAG GGTGAAGTCA CCTATAGCAT TTCCTAGTGT 120
ATGGAAGTAT TAATTTCTTT CTTTACTGGA AGAGCTACTA GCTTTTCTTC ATACAGTTTC 180
CTCTGCTCCA GTTTCATAAG TTCTTTTGT GCTTGATCT GTTTAGGATC AGGTGATATG 240
GCTTCATTTC TCATGACTGA AGCCCGGCAA CATAACACTG AAATTCGAAT GGCAGTCAGC 300
AAAGTGGCTG ATAAAACGGA TCATCTCGAG 330

```

(2) INFORMATION FOR SEQ ID NO:1142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1142:

```

GAATTCGGCC AAAGAGGCCT AGAGGGGAGC CTGGCCTCTG GCATATTCAT CAAGTATGAG 60
TTCTGGGGAT GAGTCACTGT AATGATGTGA GCAGGGAGCC TTCCTCCCTG GGCCACCTGC 120
AGAGAGCTTT CCCACCACT TTGTACCTTG ATTGCCTTAC AAAGTTATTT GTTTACAAAC 180
AGCGACCATA TAAAAGCCTC CTGCCCAAA GCTTGTGGGC ACATGGGCAC ATACAGACTC 240

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ACATACAGAC ACACACATAT ATGTACAGAC ATGTACTCTC ACACTCCAGT CGAG

294

(2) INFORMATION FOR SEQ ID NO:1143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1143:

```

GAATTCGGCC AAAGAGGCCT AGTTTtagTT CAGAATAACA TTAATTTTGA GAGATTGAGG      60
TAAAGAACCT TAACTAATGC TAAGGAGTTT ATTTTGATTA ACATAGGTTA TTCTGACCAC      120
CACCTCTTCC TTCCTTAATC TCCTTAGAAT CTGACAGTCT CAAAGCTGTC ACACAAATTA      180
GACTAATTTT GACACTTTGA AATGAAAAC TCAAGGAAGA AGTAGCCACG GACAGTTATG      240
TTTATAATCA GTAGGTGGCA CTCTTCCTC AGGTAGCCCC CCATTTTCAC ATGATGTGTT      300
TGAAGGTAA ATGCCACCA AAGTGCTCGA G                                     331

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(2) INFORMATION FOR SEQ ID NO:1144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 508 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1144:

```

GAATTCGGCC AAAGAGGCCT ACTTCAGCAT GACTACTCAG TTGCCAGCTT ACGTGGCAAT      60
TTTGCTTTTC TATGTCTCAA GAGCCAGCTG CCAGGACACT TTCACTGCAG CTGTTTATGA      120
GCATGCAGCG ATATTGCCCA ATGCCACCCT AACACCAGTG TCTCGTGAGG AGGCTTTGGC      180
ATTAATGAAT CGGAATCTGG ACATTTTGGA AGGAGCGATC ACATCAGCAG CAGATCAGGG      240
TGCGCATATT ATTGTGACTC CAGAAGATGC TATTTATGGC TGGAACCTCA ACAGGGACTC      300
TCTCTACCCA TATTTGGAGG ACATCCCAGA CCCTGAAGTA AACTGGATCC CCTGTAATAA      360
TCGTAACAGA TTTGGCCAGA CCCCAGTACA AGAAAGACTC AGCTGCCTGG CCAAGAACAA      420
CTCTATCTAT GTTGTGGCAA ATATTGGGGA CAAGAAGCCA TGCGATACCA GTGATCCTCA      480
GTGTCCCCCT GATGGCCGTT CGCTCGAG                                     508

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(2) INFORMATION FOR SEQ ID NO:1145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1145:

```

GAATTCGGCC AAAGAGGCCT AAATTGCTGG CGGATTTAGA CCGGTAGAAA ACCCGGGATG      60
GTTTATTTTG ATTGAGCCCC CTCTGGGTGG CAGAGAGGAG GCTTGGGCTC TGGGCCCTTT      120
ACGTTTGAGG AAATGGCTTT ATCAGCTCAG TTGAAAGGTT TTTCCCTCTA GCTAGTGAAA      180
GATAAACTTG GAAATGCAGG TTTCTCCAGC GGTGTTGTTT GGGGACAGGG GTCGCCTAGG      240

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GAACTTGCAG GGGCCGCGGC CTCTGTTGTG CTCTTCTGGA GAGTGCAC TG TTTGTGGAAC      300
TTTTCTAGAG TGGCAAAAAC GATCTCCACT GTCGGTGAAA GGGCAGTTCC TGAAGTCAGC      360
TCATGGTCCT GGCTCCCCTT CTCCCAGCA GTGAACTGGG GGTGACTTCC TGATCTGCCC      420
AGCACAGGAG AGCCCCGCAA AGCGCTGGG AGGCCCTCGA G                                461

```

(2) INFORMATION FOR SEQ ID NO:1146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1146:

```

GAATTCGGCC TTCATGGCCT ACCATTTTGG ATTGATTTT GTGTATAGTG TAAGATGAAC      60
CCAATTCCT TCTTTAGCAT GTGGGAATC TGTTTTCTG TCACCCTTT TTTTGAGAT      120
GGGGTCTCAC TATGTTGCC AGGTGGCCA TGAACCTCG AGGTCATGTG ATCCTCCTTC      180
CTCAGCCTCC TGAGTAGCTA GGAACACAGG CATGTGCCAC TGTGCTGGC TCCAGCAACA      240
GTTGTTGAAG AGACTGTTCT TTATTACTT ATTGTATCCT CTGTGCTCGA G                291

```

(2) INFORMATION FOR SEQ ID NO:1147:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1147:

```

GAATTCGGCC TTCATGGCCT ACCCACCTGC CCACGCCGAC TTGGGAGGAT GGTGGCCTGC      60
AGCGGCCAAG AAGCCAAAA AAAAATTTT TTTTTTTTCA GATACTGTGC TTGATTTTGG      120
GAGAGGGGAG AGGTGGAAAT TCCTAAATGG CTAATGCACT GTTCCTCCA GCCCGAATGC      180
CTCCTGCCAA ACCCCTTTTC CCTGCTGCCT CTGTCCCGCG ATCCTTGTTT TCCCCTGGGT      240
CCGAAACATT TTTCCGAGG ATGAACAGGG GACATCTTGA GGTTCCTCAA CTCTTGCTTT      300
GGTGTGTTGCC GCAGCATGGA AAACAGGCAC CCTCGAG                                338

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(2) INFORMATION FOR SEQ ID NO:1148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1148:

```

GCAGGAATCA GATTCACCTA TTAGTAAGCC GCACTCGCTG AAGGGGAGAG CATGAGCAAG      60
GCAGACGTGA GCCACTGCGC CCGGCCTGAA GAGTTTTTGC TAATTGGATA TTAGGGAAAA      120
CCACAGGATG GATTAAGACA AGAGAGGGAA GGTAAAGTTC TAGACAGCAG GATTATGTCT      180
GTTAGTTGGT TTTATGTCAC TTTTCTAGCC AAGCTGTACC ATCCTGTTTT TGTGTGTTGG      240
TGAATGCTTC CAGCTCTTTT CCTCCAGCCC TTGGAAGAGG TGGTCTATA ATTGTTAAGC      300

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ATCTAGCTAG GGTGATGAGT AGGAATAGCA ATAAGTGACA GGGAAAGTTGA AGGCTGCAGG 360
GCTCTTTGCA GCGGGCTTAC TCGAG 385

(2) INFORMATION FOR SEQ ID NO:1149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1149:

GAATTCGGCC TTCATGGCCT AGTCACATGA ATGAGAGAAT TCTAAATGCA AGAAATGTGC 60
AAAGGCACAG AAACACAGAA GAGCATGTTG TACAACCTGG CTATAGTTTA GATTTTGTGT 120
GTGTGCTATG AGAGTGTGCG TGTGCTGTGA GTGTGTGTGT GGGCGCACGC ACGCATTGTG 180
AGGAGGTAGG GAGAAGAGTG CCGGCATAAC ATGAAATGAT ATTGGACCTC AAATGGTATG 240
CTAAGATGTT TGACAATTTT ATTCTAAGCA GTGAGTTTTT AAATTTAGAC ATGCAATCTC 300
GAG 303

(2) INFORMATION FOR SEQ ID NO:1150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 419 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1150:

GAATTCGGCC AAAGAGGCCT AATTGAATTG TATTGGTCTT TTTCTCTTTA ATATTTTAGG 60
TGCTTTATTA TATATTAGGA TTATTAGTCC TTAGTTTGTG AAATAAGCTG CAAATATTTT 120
TTCCCAATT TTTCTTTTGT CTCTTGCTT TATTCTGGT GTTTATTTTT CCCCAGGTGT 180
ACTGTTTTCT ATAGCCAAAT TATTGATCTT TCTTTAAT GCTTTTTTGT TCACTCAAAG 240
GAAGGTTTTC ACCACTGAGA GGTATATAAA TAATTCATC ATATTTTTC TCTTTTTTTT 300
TGCTTATGTT AATTTTTTGT TTGGAACAAT CTCAAATTCA CAGAAGTGT GTGAGTACGT 360
TGCAAATAAC TTGTTTTTTC CTTATGCATT TCAGAGTAAG TTACCAGTCC GCGCTCGAG 419

(2) INFORMATION FOR SEQ ID NO:1151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1151:

GAATTCGGCC AAAGAGGCCT AGCGGATGGA GTCTTTGACA GTGTTTTTGA TCTCCTGCAG 60
ACGGCTGCTC AGGAAGCTGT TGACCCGATC CAGTTCCCGG TCGGGCCACT CCAAGAGCCT 120
CTCCCTGGCA GGCCTTGGCT CCCGGCTTCC AGAAACACGA TTTGCCTGCT TTAGAGCTTC 180
TGCTGCCAAC TGGGCCTTCT CCTTTTCCTT CTTTTTCAGC TTGTGCCGGG CCCGCTTGGC 240
GGCCTTGGCG CTGTTGGGGA CTTTGGGCTC CGTGCTGTTG ATGAATTCCA GCAGCTCATC 300

CACATCTCGG TGGTCCACGG CGGGCTCCCC AGGGATCCCG CCCAGGGTGC CCCCTTCAT 360
GGGCAGCTCC TCTTTCCGCC TGGTCAGCCT CGAG 394

(2) INFORMATION FOR SEQ ID NO:1152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1152:

GAATTCGGCC AAAGAGCCTA CTGTGAATCA CGAACTGGCT GAGGGCGGCT GACCGTTGT 60
AGCTGTTCCG GCCATGCACC ATAAGAACCG GCCAAGATGC TTAAATTGAG TGATGGAGAA 120
GTCTGCAGCC AACGAAGCCT GTTTTCCTTC CTTTCCTTCC ACTCCACGC CGCAGTCAGA 180
TTCCTGAATC ATGCTGACGT CATTGCCTCC GTCCCCTACT GCACAGGTGA GCTTGCCCGT 240
GCGCTCCTGA AGCAGGCGCA CGATCTGGGC CTTCTGGGTG GGGGCACATC NGCAGCAGAC 300
TACGGCCGGG CACTGGCAGG CCAGCTCCAT GAACTCGTAC TCATAGTACT TGAGGCAAAC 360
CTCCAGGGAG TCTCCCGAGA TGACCAGGGC ACAATCATGC TTCCTGCGGA AGGCGTTCAG 420
CTCGAG 426

(2) INFORMATION FOR SEQ ID NO:1153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1153:

GAATTCGGCC AAAGAGGCCT AAGCTGATAT TTATTGGACA TTTGCACCAT GCCAAGCATT 60
CGGCTTGGAT TATCCCATTT GTTCTCACA GCCGGTATT ATTGTCTGCT CCTCTGTGCC 120
AGGTGCTGTG CTCTGGGCAG GGGCACTGCA TGGGCTGCCT GCCCTGGTGG AGCTTGTGGT 180
CTGATGGGTG AGGCTGACCC AAGCCACCCC CATTGCCAAC AGGGCCAGGG CAAGAGTACA 240
CACAGGGGCC TCATACCATA TGTCTCGAG 270

(2) INFORMATION FOR SEQ ID NO:1154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1154:

GAATTCGGCC AAAGAGGCCT AGCTGAAATC ATTCTGAAAA CTCAAACAGT AGACTTCAGC 60
ACACAAGGAA AGCCAAAGCC ATTTGAGGGG GAATAAAGCC AAAAGCCTTT CACCTTATTC 120
GTTCCAAGAA TCTCACCGCC CCTCCTTAT CCCCCTCCAA AAATAAGCCA TTGCACACAG 180
ACAGGCAGCA TGGCTAGCAA ACGAAAATCT ACAACTCCAT GCATGGTTCG GACATCACAA 240
GTAGTAGAAC AAGATGTGCC CGAGGAAGTA GACAGGGCCA AAGAGAAAGG AATCGGCACA 300

CCACAGCCTG	ACGTGGCCAA	GGACAGTTGG	GCAGCAGAAC	TTGAAAACTC	TTCCAAAGAA	360
AACGAAGTGA	TAGAGGTGAA	ATCTATGGGG	GAAAGCCAGT	CCAAAAAACT	CCAAGGTGGT	420
TATGAGTGCA	AATACTGCCC	CTACTCCACG	CAAAACCTGA	ACGAGTTCAC	GGAGCATGTC	480
GACATGCAGC	ATCCCAACGT	GATTCTCAAC	CCCCTCTACG	TGTGTGCAGA	ATGTAAC TTC	540
ACAACCAAAA	AGTACGACTC	CCTATCCGAC	CACAGACTCG	AG		582

(2) INFORMATION FOR SEQ ID NO:1155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1155:

GAATTCGGCC	TTCATGGCCT	AGGATCCGTG	AGGGAGACCG	CATCATCCAG	ATTAACGGTG	60
TAGACGTCCA	GAACCGGGAA	GAGGCGGTGG	CCATCCTGAG	CCAGGAAGAG	AACACCAACA	120
TCTCCCTGCT	GGTGGCCCGA	CCTGAGAGTC	AGCTGGCGAA	AAGGTGGAAG	GACAGCGACC	180
GGGATGACTT	CCTGGATGAC	TTTGGCTCTG	AGAATGAGGG	GGAGCTGCGT	GCTCGTAAAC	240
TGAAATCACC	CCCTGCCCAG	CAGCCCGGAA	ACACTCGAG			279

(2) INFORMATION FOR SEQ ID NO:1156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1156:

GAATTCGGCC	AAAGAGGCCT	ACATTGTAA	TATAATTTAA	CAGAAGTTGT	GAAACTAAAA	60
TTTTCTAAGA	TTAACTGGTA	GTTCAATTGA	AATGAACATA	ATGAACAGAA	TTTATGACTC	120
CACGTGTGAA	AATGCTATCA	AATAACTAAG	GAATATATAT	GGAATAAGTG	TACATATGTA	180
AAATATTGTT	ACTAGAGTTA	GATATGTGCC	AAAGTCCATT	TATCCCAAAT	CCTGTCTGAA	240
AAGGAGGGGT	ACATTGGTAA	ACATTTTGGA	GTGCTTAAAA	ATGCCAAAAA	CAAAATGGTA	300
ATTTCTACTT	TGATAAGTA	AAAAAGTTAA	ATGTGTGTAA	AAAAGTGCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:1157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1157:

GAATTCGGCC	TTCATGGCCT	ACGGTGGCCT	TTGGGGCCGA	AGTGGGCGTG	CGGCTCGCGC	60
TGTTTCGCGC	CTTCTGGTG	ACGGAGCTGC	TCCCCCGTT	CCAGAGACTC	ATCCAGCCGG	120
AGGAGATGTG	GCTCTACCGG	AACCCCTACG	TGGAGGCGGA	GTATTTCCCC	ACCAAGCCGA	180
TGTTTGTGCG	TGGAGAAAGA	TCGTCTTTCC	TCCCTCCCCA	TGACCGGGCT	TCCCGCGGGC	240

ACCTGTGCGT TTTCCACCCC GAGACGGCCT TTGTAGGGAC CCACTGCCCA CTCCGCTGCT 300
GTGCGCTGGG TTCCGCCTCC TAGGGCTCGA G 331

(2) INFORMATION FOR SEQ ID NO:1158:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 178 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1158:

GAATTCGGCC TTCATGGCCT AAAAAGCTTAG ACTGACATCT AGCTTTGACA ATCATAGTAT 60
GTTTTATTTT CCTGAGGGGG AATAACTTAT AATGCTGTTT AGTTTTGTAC TATTGGTGTG 120
TTGGTGAATT TTTAAACTGT GTGCTAACTG CACGATTGAA TTCTAGACCT GCCTCGAG 178

(2) INFORMATION FOR SEQ ID NO:1159:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 401 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1159:

GAATTCGGCC TTCATGGCCT AAGCACTTTG GGATGTTGAA GTGAGGGGAT TGCTTGAGCC 60
CTGGAGTTCA AGACCAGGCT GGGCAATATC GCCAGACCCC ATCTCTTAAA AAAAGTAGTT 120
CTTACTGTT GCCTCTATTG ACTCTTGAAT GCAAGAAAGA ACATTGCCCC TTTGACTTCT 180
AATATTATCT TATATTCTCT CTTCTTCAAA AGATCAGAAG CACATGCTGT AAACATCAAT 240
CATGATCATC TTTGTCTCCC TTATCAGATT GTCAAAATTA TATCTTTTCC TATTTTCCTG 300
CATACCTTAT CTTTTTCTTA AATTCTCAGT TCTCCAAGTT CTCAGAAATC ATAACCTCAG 360
ACCTTGAAAT GATGACTCTG TTCCACCCCC ATCGTCTCGA G 401

(2) INFORMATION FOR SEQ ID NO:1160:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 350 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1160:

GGGGGGCCAG ACACGCNTGG GGTAAGAAGG GCCTGGTGGG AGGAGTTCAC AGAGCAGACG 60
GTGCACTGGG ACCAGGAGAG CAGAACACAG GCCATACTA TAGGGCAGGT GGGGCAGGAA 120
CGGGTTAAAA ACGAGATCCA AGCCAGCCAG ATCGCAGGAG GTGCGGGGGC GTCGTCCCCC 180
TTCTGTTCTC CCCCCAAGGT CACAGTGCAT GCAATAAAAT ATATATACAG GAGCTAGATC 240
CGTCTCTGCG AGGGGCTCTG AGGGTCCAGA GCTCCCTTCG GGTGGCGGGA AGCCAGTGGC 300
GCTCCCTGGC GGCCAGGCCG GGCTGGAGCC ACATGCGTCG GGGTCTCGAG 350

(2) INFORMATION FOR SEQ ID NO:1161:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 597 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1161:

```

GCCCCGGAGC ATCTTAAGAG CTGAGCGCAG CTGACAACCTA GGGGCCGGAC CGTCGCAGGA      60
GGCGTCCGCT GGATACCTTC CCCCTTCCCT GACCTAGAGC TCTACAGCTG CTGCCTCGGT      120
ACTGACCGAG GGTTCACAGA GCTGTCTCAC CATTGCAAAA ACGTTATAGC AACAGCCTCT      180
GATTACGACA TGGCTGAGAT CACCAATATC CGACCTAGCT TTGATGTGTC ACCGGTGGTG      240
GCCGGCCTCA TCGGGGCCTC TGTGCTGGTG GTGTGTGTCT CGGTGACCGT CTTTGTCTGG      300
TCATGCTGCC ACCAGCAGGC AGAGAAGAAG CACAAGAACC CACCATACAA GTTTATTACG      360
ATGCTCAAAG GCATCAGCAT ATACCCAGAG ACCCTCAGCA ACAAGAAGAA AATCATCAAA      420
GTGCGGAGAG ACAAAGATGG TCCTGGGAGG GAAGGTGGAC GTAGGAACCT GTTGGTGGAC      480
GCAGCAGAGG CTGGCCTGCT AAGCCGAGAC AAAGATCCCA GGGGGCCTAG CTCTGGATCT      540
TGTATAGACC AATTACCCAT CAAATGGAC TATGGGGAAG AACTAAGGAA CCTCGAG      597

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(2) INFORMATION FOR SEQ ID NO:1162:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1162:

```

GAATTCGGCC TTCATGGCCT AGAAATAACT TAAAATCCTG AATCAGATGT TTCTCCGTAC      60
ATGGCCTATC CAGATCACCG TAGGGTGAAG CTCAAAGTCA GCAAGCCTCA CCCACATACT      120
CAGAGCTTCC TTTCAGTGTG GAGACCTTCT TCCCTCTGAG CAGATGACAA AGGAGTTTGA      180
AACCAGCCTG GCCAACATGG TGAAGCCCCG TCTCTACTAA AAACACAAAA ATTAGCTGAA      240
ATGGTGACTG TAATCCAGC TACTCAGGAG GCTGAGGCAG GAGAATCGCT TGAATCCGGG      300
AGGCGGAGGT TGCACTGAGC TGAGATCGTG CCATTTCATT CCAGCCTGGG CAACAGAGCA      360
AGCCATCACA GATTTGGGAG CAACCAAGAA AGCCAGGGAC AGGATATGCT TGGTAACCTG      420
GCAAGAGCTG ACAAAGGGGA AAAATAAAAC CCCACAGAAA GAGCAGGGAA CTCGAG      476

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(2) INFORMATION FOR SEQ ID NO:1163:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1163:

```

GAATTCGGCC AAAGAGGCCT AGATGAACAT GAACCTGCGG GAGCTGTACC TGGCGGACAA      60
CAAGCTCAAC GGCCTGCAGG ACTCGGCCCA GCTGGGTAAC CTGCTCAAGT TCAACTGCTC      120
CCTGCAGATC CTGGACCTCC GGAACAACCA CGTGCTAGAC TCGGGTCTGG CCTACATCTG      180
CGAGGGCCTC AAGGAGCAGA GGAAGGGGCT GGTGACCCTG GTGCTGTGGA ACAACCAGCT      240
CACGCACACA GGCATGGCCT TCCTGGGCAT GACACTGCCG CACTCTCAGA GCCTGGAGAC      300

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GCTGAACCTG GGCCACAACC CCATCGGGAA CGAGGGTGTG CGGCACCTCA AGAACGGGCT      360
CATCAGCAAC CGCAGCGTGC TGCGCCTCGG GCTGGCCTCC ACCAAGCTCA CGTGCGAGGG      420
CGCGGTGGCG GTGGCGGAGT TCATCGCTGA GAGCCCCCGC CTCCTGAGAC TGAACCTCG      480
AG                                                                                   482

```

(2) INFORMATION FOR SEQ ID NO:1164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1164:

```

GAATTCNGCC AAAGAGGCCT AAGGAGCGCT GTTAAAGCTG ATACATTCTT GTGGGTCAAC      60
TATGCAACTA ACTCAGATTT TGAGCAAACA AAGCTCTCAA GTTGGTGATC CTCAGGAGTC      120
TCTGCATTAG TTGGACAGCT CTTCTGGAAT TATCTTCTAA GTCAACTGTG GGTGCGGTAG      180
GTGGCTCTGC TGATTTTTCG CTGGACTTCC ACATTTGGGA CCAGTTGGCT GTNATCAGCT      240
CTAGAAAGGG TGTGGCTGTT TTACATTGGC TGTTCCTCCT ACATTCCTCA AGCAGGTACT      300
GTAATAAAGA ACTGGAGAAA TACAGTCAGA TGGGAAGTAG CCCCTGCTGT CAAGGAGCTT      360
GCCATCTAAT GGGGAGAGCA GGCAAGTAAA CCAAAGACTA CACAGTGCAG TATGGTAAGT      420
GCCATGATTT TGATGTGACA GGGCACAGTG GACGACCTTC CAAATCAAAG CAAGTAACTA      480
GGGGCAGACT CGAG                                                                                   494

```

(2) INFORMATION FOR SEQ ID NO:1165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1165:

```

GAATTCGGCC TTCATGGCCT AACTCTTATC TGTGAACACA ACTTTTCAGC ACTACAAATG      60
CAAGCAACTG CGCAGTCACA GTTGGGGCTG CTAATTTGGA AATCCAGTTT AGGCTGATTT      120
GAAAAGACAA CAGCATTTT GCAATCACTG GTGTATCCTT TACGAGAGAG CTAGTCATGC      180
CATTTTTTGT TTTCTGAAGA CGGCCTTTT TTCTTTTTA TTATTATTAT TTTTTTAAAT      240
TTGGGATCTT GCCTAATTCT TTAGTACAAA GCCTGGCCCT AAAACCGTAG AGCTCGAG      298

```

(2) INFORMATION FOR SEQ ID NO:1166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1166:

```

GAATTCGGCC TTCATGGCCT AGATAGAAAA GAATATTCCA AGTGTATGAA GTATAGAGGT      60
GGGGAAGTTC AGGGTAGAGA AGTANTAGCA GGAATAGAAT ATAGGGGGAC AGAAAAATAG      120

```

```

AGTGGAGCCA GATTGAGAGA ACTTTNAGAA GCAGGTAAAG AAGTTTAGGA TTAATGGACA      180
AGTCATTGGG TCTCCAGGTT TCTTTGAGGG AGAGTGATAT CTGAGCTCTG .TTTtagaaag      240
ATTAATCTGA AAGGAGGTAA CTCGAG                                           266

```

(2) INFORMATION FOR SEQ ID NO:1167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1167:

```

GAATTCGGCC TTCATGGCCT AGGTAAATAA TGCCAAGTTA CTGGGGTCTA GAAAGAAAGT      60
TTTCTCTTGG ATCAAGAGAG TGTGAGTTTC CTAAGTTTCT TCAGCAGGGA TGTGGTCCT      120
TTAGTTAGGA GGTTTAAAT CACCAGGAAG TAAGGGTGAG GAAGAAAGTC TGGGTCCATG      180
TTTGAGAAGG TGAATGATGG TGGTGAAGT CCTTCCTGTG ATGAGTTAAT GATGCGTATT      240
TCTGATAAAG ATGGGAAGTT ATTTACATCG ACATTAACCA AATCTACCCT TCATGCAGAA      300
AGAAAGAGCT CTTGGGCCAT TCTCTATTAA TGAACCATA CCAGGGTCAA TATTACAGTG      360
TCTCTGAAAT AACTGAAAA TACTTCCCTG GCTCAGGTGG TGGCCCATGC TACCTCCAGG      420
CAGTTCTACT TGATTAATGA TGCAATGGAG ATAATCCTAT TGCATCCACC ATCAAGGAGA      480
GTTGGGCAGT CAACTCGAG                                           499

```

(2) INFORMATION FOR SEQ ID NO:1168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1168:

```

GAATTCGGCC TTCATGGCCT ACACAAACAA ACCCAGAATA CTCTATTACT GTATTTGTGG      60
GGTACAATCC ACTCAACTCT ATTATGAAGC CCAAAAAATA AATCTGTTAA AAACAATAAT      120
AGCTACACCA ACCTGTTAAG AGATAGGTAA TATAAAAATA TATAGTTTGA GACAACTAAA      180
TCAAAATGGA GGAGGGGATA GAGTTCAAGA AGTAGAATT TTTTGGCGTG GCTTTTCTTG      240
GCCTTTGTTT GCTTCTATTC TTTTATTTGG AATCAAAGAT AAGTTATCAA CTCTTTAAAA      300
TAACCTTGTTA TATGTATAAG ATGTTTCTG TAAGCCTCAT GGTAACCACA GTACAAAAAC      360
CTATAGTACA ATTCTTAAAA ATAAAATACA AAAAAATTAA AATATACTAC CAGAGAGCTC      420
TCGAG                                           425

```

(2) INFORMATION FOR SEQ ID NO:1169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1169:

```

GAATTCGGCC TTCATGGCCT AAAAGGTTTG ATCTTGTAAAT GTGTCACGTGT GTTTCCTTAG      60
TGGCCAGCCA GCCTTCAGAA TAGCTAAAGG CCTTCCTTCC TTCCAGTCAG CCTGAGAGAG      120
AACACCTGTC CCCTAAGCAC CTGGTGTCTC CATTGGAGGC AGACTGCTCT CAGGAGACTA      180
CTAGAAGCTT CAGCCCGGAA GACAGGCTGC TCTCTCATGC TGGTGGCCCA AATTGAGAAA      240
GTGGTGTCCC TTCCTGATT TGCCACCAGC CCTACCGAAT AGTTGTAAAC CAGTATCAGG      300
AATTGGGATC CTCTCGAG                                     318

```

(2) INFORMATION FOR SEQ ID NO:1170:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1170:

```

GAATTCGGCC TTCATGGCCT ACATTGGTCG TTTTATTGCC ATGGCACTAT TTCATGGAAA      60
GTTTATCGAT ACTGGTTTCT CTTTACCATT CTACAAGCGT ATGTTAAGTA AAAAAGTTAC      120
TATTAAGGAT TTGGAATCTA TTGATACTGA ATTTTATAAC TCCCTTATCT GGATAAGAGA      180
TAACAACATT GAAGAATGTG GCTTAGAAAT GTACTTTTCT GTTGACATGG AGATTTTGGG      240
AAAAGTTACT TCACATGACC TGAAGTTGGG AGGTTCCAAT ATTCTGGTGA CTGAGGAGAA      300
CAAAGATGAA TATATTGGTT TAATGACAGA ACGGCGTTTC CTCGAG                                     346

```

(2) INFORMATION FOR SEQ ID NO:1171:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1171:

```

GAATTCGGCC TTCATGGCCT ACACTTTATT CCCTTTTAAG TCTGGTAAAG AATGAATACT      60
TGGACGTTTT GTTTCATGCA GATTTAGTTA GCAACTCGAT TATCAAATGG TAGAATATCT      120
GTATGCACTG AAGCCAAATT CTCAGTAACT CAGCTTTTGN TAGTCATATG AGGATGATGA      180
ATAATAGGAN TCCAGAGCAG TTAACAAATT GATACAAGTG GTAGGAAAAT TTGATATGAA      240

```

(2) INFORMATION FOR SEQ ID NO:1172:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1172:

```

GAATTCGGCC TTCATGGCCT AGTTTCNTTT TTGTATCTCT ACTGATATCA CCAGGATAGT      60
NTACTCTCCT TCTAGCTTTC TGCTTACCGC AACTGGGATA ACACACACAT ACACACCCAC      120
AAAAATGCTC ATGAACCCAA TCCGGAGAAG GTTCCAGCAG GTCCCCCACC CTCCCCTCCT      180
CCTCCTACTT CTCCTCTTGA CAGCGAGGAC AGGAGGGGGA CAAGGGGACA CCTGGGCAGA      240

```


CCCCCGGCT CTCCCCCACC CCCACCCCA TCTCGAG

277

(2) INFORMATION FOR SEQ ID NO:1173:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1173:

GAATTCGGCC	TTCATGGCCT	AGAAAAGTCT	AGAAAATAGC	TTAAATAACA	AACACGTGTG	60
GATTTGTTAG	ACCAAGAGCA	AGGGAGACCA	TTAATGCAG	TTATTTAACA	ATATTTAGTA	120
CTTTCCTTTA	CCTTGTCTGC	TGTGCCATCA	TTCATGCCTG	TCAGTGTAA	AAATCCCAA	180
ATTTCCCAA	CAGATTTTCA	TTCACTTCC	GTCAACTTTT	AAATTAAAGT	TTTTAAATC	240
CTGTCCCCAC	TCCTCGAG					258

(2) INFORMATION FOR SEQ ID NO:1174:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1174:

GAAAGTTGCT	TTGATGTCA	AAATGGAAAA	TGAAAAGTTA	GTTTTCAGCAT	GTGAAGATGT	60
GAGGCATCAG	TTAGAAGAAT	GTCTTGCTGG	TAACAATCAG	CTTCTCTGG	AAAAAACAC	120
TATTGTGGAG	ACTCTAAAAA	TGGAAAAAGG	AGAGATAGAG	GCAGAATTGT	GTTGGGCTAA	180
AAAGAGGCTG	TTGGAAGAAG	CAAACAAGTA	TGAGAAAACC	ATTGAAGAAT	GTCTTGCTGG	240
TAACAATCAG	CTTCTCTGG	AAAAAACAC	TATTGTGGAG	ACTCTAAAAA	TGGAAAAAGG	300
AGAGATAGAG	GCAGAATTGT	GTGCGCCACT	CGAG			334

(2) INFORMATION FOR SEQ ID NO:1175:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1175:

GAATTCGGCC	TTCATGGCCT	AGTGCTTGAA	CTCACGCATC	TGTTTTACCT	GCATCTGCAG	60
GCGATGGGCG	AGGGGCCACG	GAAAGAGTCT	GAGGGCTGCT	TGGTGTAGTC	AGGTTGTGTC	120
CAGGCATGCG	GAGCTGTGAG	TGCCTGCAGG	AGAGACACCC	AGGAGGAGTT	TTTACATTTT	180
GGTCTAAAAA	GCTCTTGGAT	TCATCTCATC	TCATGGAATG	ATCCTGTCGG	ATGACGCTGA	240
CGTGATTGCT	TCAGACTTAG	AGGTGAATAA	ATTGAGGTCC	AGAGAGGTCA	CAGTCACGAA	300
GCTCATGGTA	GACTGAGGCC	ACTAAACACC	CGTCTCCTGA	TTTTCACTGG	CGTCTCATT	360
TGCATACACC	TGGGCCATCT	TGGTTTTTGC	AAGAAAATC	GAG		403

(2) INFORMATION FOR SEQ ID NO:1176:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 590 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1176:

```

GAATTCGGCC TTCATGGCCT AGGTACCTTG AACATGGCTG TAAATTAATC TTAACTGCC      60
TTGGTGGAGT CTTCTGATT TATTGAAGAG AATAATCAGG AAAATAATTT TTGTTTGTTT      120
TTTGAGACGG AGTCTCGCTC TGTCAACCAG GCTGGAGTGC AGTGCCACGA TCTCGGCTCA      180
CTGCAGCCTC TGCCTCCCAG GTTCAAGTGA TTCTCCTGAT TGAGCCTCCT GAATAGCTGG      240
GATTATAGGT GTGCACTACC ATGACCAGCT AATTTTGTG TTTTATAGTAG AGATGGTGTT      300
TCACCATGTT GGACCGGGCT GGTCTCGAAC TCCTGACCTC AGGTGATCTG CCCTCCTCAG      360
CTTCCCAAAG TGTGGGATT ACAGGCATGA GCCACCGCAC CTGACATAAA TATTTAATGT      420
AATACCGTGT AAGACTTTTC CATTGGGTTT TGAGAAACAC GTTAATGAGA GAAATTGCTT      480
AACATTGGAG AGGATTGCAG AGAATATTGA CTAATATGGT GGGGTGAGGA GGAACAACAT      540
CAATTAAGAT TCAGATTAT TATTAAAAA AACTAAAAGG CGGCCTCGAG      590

```

(2) INFORMATION FOR SEQ ID NO:1177:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1177:

```

CTCGAGGTAG CCACAGTCCT GATCCTAGTG ACAAATGGGG GCATGTGTCT ACATCCGGGT      60
CGGCGGAGGG CTCATTTTAT CTGGCCTGGG GGGAAATGAG TATTAATTTG TTTACACAGA      120
CGTAAACACA GCCCAAAACG CATCAGCACG TTGACTCAA CGCCCGCAAC GCCAGGGCAA      180
AGGCAATTTG GTTAACAGGG GGAAGCGAAC AGACGGAGAC GCCTGGAGAC CCAGGTGCCA      240
CAACCCGGTT AATCGCGGTG CAAATAAGGG CAAGTCCCTT CCCCTTGTC GTGTGTCTT      300
GACAACGACA CTAGTTCATT CTAATAACAA GCGCGCGGGG GGGTCAGATG GGCCACACAC      360
ACCCATTTTC CTCAACGGGA CCCCAACGCG ATCTCAGCCT TGCTGTGCTA CTTTAGGGCA      420
AGACGCGTTC CCCATTCCGA AGCCGCAGGA AAGCGCGGCG AGAGCGGGTT AGCCCTCGGA      480
GCGGCTAAGA GCCTCGGAAT AGCGCAGAGG AAGTCCCCAC CCCTCTCGGG GCTGGGAGCC      540
CTAGGCCATG AAGGCCGAAT TC                                     562

```

(2) INFORMATION FOR SEQ ID NO:1178:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1178:

```

GAATTCGGCC TTCATGGCCT AGAAGCACAG GTAAACAAG CTGGGGCTTA TGGTGAGCAT      60

```

```

TGGAAGCAGG GAGCAGAGTG GGGAAAACAG CAGTCTTATG GGAAGTGAAC AGGGTTGGAG AATGCCCAGC 120
GTGATCTGAC TCTATCTGCA AGGTAGTGTG GGAAGTGAAC AGGGTTGGAG AATGCCCAGC 180
TGGTGTCCAC CGCAGAATTG ATTTTCATGTT TGGTATGCAG GGACCCCCCA CTCACACTT 240
AGTCACAGAA ATCTGTGTTG ATTGTTGTGG CATGAAAGCA GGGAAAAATA GTTGTGTTTT 300
TTCTCCACAC TTCCTTCCCA AGATCCCGGC TAACTCGAG 339

```

(2) INFORMATION FOR SEQ ID NO:1179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1179:

```

GAATTCGGCC TTCATGGCCT ACTCACCGGA GAAAAGAAGT TTCNGAAGAA AACCACAACC 60
ATGCCAATGA ACGAATGCTA TTTTCATGGT CTCCTTTTGT GAATGCAATT ATCCACAAAG 120
GCTTTGATGA AAGGCATGCG TACATAGGTG GTATGTTTGG AGCTGGCATT TATTTTGCTG 180
AAAACCTCTT CAAAAGCAAT CAATATGTAT ATGGAATTGG AGGAGGTACT GGGTGTCCAG 240
TTCACAAAGA CAGATCTTGT TACATTGGCC ACAGGCAGCT GCTCTTTTGC CGGGTAACCT 300
TGGGAAAGTC TTTCTGCAG TTCAGTGCAA TGAAAATGGC ACATCTCCTC GAG 353

```

(2) INFORMATION FOR SEQ ID NO:1180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1180:

```

GAATTCGGCC AAAGAGGCCT ACAGAGTGCT GTGCTTAAGT TTTACTTCTT TCCACCTTTA 60
AATCTCTGAT AAGTTTCTTT TTATCTAAAG GTTCCACTTT GTTCATTACT TTTTGTTTCC 120
TTATTATTGA TTTGTTTCGAG AACCTGAGTT TCTTGACCTG TGTGATTTTG TACCACCTGG 180
ACTTTCTGAC TGTGTTTGCC CAGGCTGGAG AGCAGTGGTG GGATCATAGC TTAGTGGACT 240
CAAGCCATCC TCCCGCCTCA GCCTCCCAAG TAACTGGGAC TATGGGCACA CTCGAG 296

```

(2) INFORMATION FOR SEQ ID NO:1181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1181:

```

GAATTCGGCC TTCATGGCCT ACTTGAGTTG TACATTAGAT CTTTAAACTT GTTAGTCCTA 60
CATATCTGCT ATTTTATC CTTTGACCTA CATTTCCTCA TTTCTCCCA GTGTTCTCTC 120
CCCAGGTAAT CATTGTTTTC TCCCTTTCT CTGTAAATTT GACTTTTTTT TTTGGATTCC 180
ACATATAAGT GAGATCATGA TCATGCGGTA TTTTCTTTC TGTGCTGGC TTATTTTACA 240

```

TAGTATTATG TCCTCCAAGT CTACCCACGA ACTCGAG

277

(2) INFORMATION FOR SEQ ID NO:1182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 192 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1182:

GAATTCGGCC TTCATGGCCT AGAGATACTG GCTGGCAATT CTTGGCGTTC CTTGGCTTGT	60
AGCTGTAAGA TGCGCTCTAA TATCAGTCTC TGTGTGCATT TGCCTTTTCT CTGTGTCTGT	120
GTTCAAATGT CCTTTTTTTT TTTTTTTTA GGGAGTCTTG CTCTGTTGCC CACTCAAAC	180
GCTGGGCTCG AG	192

(2) INFORMATION FOR SEQ ID NO:1183:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1183:

GAATTCNGCC AAAGAGGCCT AGTAAATAGT TGTCTGTGA CATTGTTTAG AGAATAATGA	60
CAAGAACAAA AATCTGTGTG TTCAGTATAG ACACAACCAT CCTTTTCTTT TTTTTTTTTT	120
TGAGACAGAG TCTCGCTCTT GTTGCCCGAG CTGGAGTGCA AGGGTGCGAT CTCAGCTCAC	180
CGCAACCTCC GCCTCCCGGG TTCAAGCAAT TCTCCTGCCT CAGCCCCCG AGTAGCTGGG	240
ATCACAGGCA TGTGCCACCA CGCCCGCTC TTTTGTATT TTAGTAGAA CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:1184:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1184:

GAATTCGGAC TACTACAGGT GATACTACAG TGACTACTAC AGTAATTCGG ACTACTACAG	60
GTGGCTAATT CGGATTACTA CAGGTGGACA TAATTCGGAC TACTACAGGT AATTCGGACT	120
ACTACAGGTG AGCTAATTCG GACTACTACA GGTGGACATA ATTCGGACTA CTACAGGTGC	180
ACCTGTAGTG GAGAACATTT AGCAATGATA AAGCCGCTGC TGATCCTTCT CGAG	234

(2) INFORMATION FOR SEQ ID NO:1185:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1185:

```
GAATTCGGCC AAAGAGGCCT AGAACAGTT AGAAACAATT TCCCTGCCTT TGCTTTGGGT    60
TCCCTGTGAT TGTCTCCAC ACTGTTTTCC TGGCTCTATC TGTCTCCCTT GCCACGGCCA    120
CTCAAGCCTA GCTGCCCAAC AGCTCCTTCC CTGAAGAACC CCGGCCTTCA GGCTTGACAG    180
GTGATCTCAT CCTCTTCTT TTCTCCAGG TTGTTGTAGA CTTCCACCTT CCCTTCTTCT    240
CCTGGTCCTT TCCCCTTCT AGTGCCAATG TGGGCCACGC TTTCATCCCA CCTACTCGAG    300
```

(2) INFORMATION FOR SEQ ID NO:1186:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 324 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1186:

```
GAATTCGGCC TTCATGGCCT AGTGATGAGC CCTCCTCTT AGCTAGGAAA ATGACGGTGT    60
TCAGAAAAGTT AAAACTTCTT CGCTGGAAGG ATTCATCTT AAAGTTGGGA GACTGGAAGA    120
AATTAAAGTG TTCTAAATGG AAGAGCATTC ACCACATGTG TTCTGTTTTG GGTGACATT    180
TAGCTTTTGT TTTTATTTTA GAAACGGAAG ACTCTGGTAG CAGTCCTTGA AATCTTGATG    240
CCATTGCTAT TTTCTGCATT GTATTGTATC TTCGTTTTAG TAGTGCTCCA ATAAAAAGAC    300
CTGCTACTAG CTGCAAACT CGAG                                         324
```

(2) INFORMATION FOR SEQ ID NO:1187:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 308 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1187:

```
GAATTCGGCC TTCATGGCCT AGTACGTTGC TGAAAAGAAG TTTATTGCTA TTTTCTTATT    60
TTATTATACA AACTAGATT TGCTTAAAC ATTTCCAGT CTCTTTAAAG GAATGCTAGT    120
TAGTGGGAGG CCACAGCTAG TAAATTACCC TCAGTAGTGG TTCAAGTAG TCCATAACTA    180
TAAAAATCGT TACGGCCAGG ATATGCCGGA ACAGAACT CCCCCTGGG GTCCTCAGCC    240
TTGGATGTCA GCTCGGCCCC TCAAGGGGTC CCTACACCTG GAAGCTGATT CCACTCATCA    300
GTCTCGAG                                         308
```

(2) INFORMATION FOR SEQ ID NO:1188:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 251 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1188:

```
GAATTCGGCC TTCATGGCCT AGAATGAAGA AGGTTCCCAA GAAGTTAGAG GAGATTCCCC    60
CAGCCTCTCC GGAGATGGCA CAGATGAGGA AGCAGTGCCT GGACTATCAT TACCAGGAGA    120
TGCAGGCTCT GAAGGAGGTC TTCAAGGAGT ATTTGATTGA ACTGTTTTTC TTGCAACACT    180
TTCAAGGGAA CATGATGGAT TTCTTAGCTT TCAAGAAGAA ACATTATGCC CCATTACAAG    240
CACCCTCGA G                                     251
```

(2) INFORMATION FOR SEQ ID NO:1189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1189:

```
GAATTCGGCC TTCATGGCCT AAGGAGTTGG AAATTGTGCA CAAAGAAAGG TGGTGAATAA    60
GTAAAGTCGT AAATTCAAGA CCACAACAGA AAGCTTCACT GCAGACACTG GACTTGAACC    120
ACCATTGAAA ACAGTCAGGA TTGGGAGATG ATAATTAGGA GGATGTGTAT TCTAGCTGTG    180
GAATTTATTG TGGGCAAGCA TAGGAATGAG AAAGTACAAT GAAAAAATGT AAGTAGACCC    240
ACCAAGTTAG AGAAGAAGGT CCTGGTTAAG AAAAATGAAA GATTTTTTTG AACACAGAT    300
TAATGTGATG AAATAGATGT TCAAGAGTGA AGATAAGTTG AAGATAGGGA CCCCTCGAG    359
```

(2) INFORMATION FOR SEQ ID NO:1190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1190:

```
GTTGTTAGGC TGGTGTGTT ATGTTGCTGT TGTTATGCTG GTCGTGCTGC TCCATGTTCT    60
CCAGGTGTTT TCCCTTTTA TCGTCACAGT TACCCCGTAC ACCTGACAAC TGGACATCTG    120
CGCCTGGGGT CTTCAGCCTA AACACACCTA AACCTCCAC CAAACCCCTC TGCTTCCGCC    180
TCCCGTGTG TGTGAGCGCC TCCACTGCCC ATCCCTCTGC TCAGGCCCCA TTTCCAGGGC    240
TCGAG                                     245
```

(2) INFORMATION FOR SEQ ID NO:1191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1191:

```

GAATTCGGCC TTCATGGCCT AGTCTCAAAA AAAAAAAAAA AAAATAGTGT TCAGCAAGGT      60
TGAAGCATAA AAGGTTAATA GCCAGAATCA TTTATCAATT GTATTTCTAT ACATCTACAA      120
GACACAATCT GAAAATGAAA TTAGAGAAAC AATTTCACTG GGCAACAAGA GCAAACTTC      180
ATCTCAAAAT AATCATCATC ATCATCATCA TCATCATCAT CATCATCTAC AATGTCATTT      240
CCCATCCAAC GCTCGAG                                     257

```

(2) INFORMATION FOR SEQ ID NO:1192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 748 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1192:

```

GAATTCGGCC TTCATGGCCT AAGGACATGG CAGAGTTCCT GCTAAAAGAG AAGACAGTTA      60
TTTAAGGAGG TTTGAGATTC AAGGGCTTTT TTAATTTTAA AATTAACCAT GGTAGAAACC      120
TGTGTGTAA TATGCTGAGG GAAGTTGCCA ATAGTGAGAT GAAAGATCTA GGCAAGGGGA      180
TAGCAAGGTG ACTGCACCAG ATACCTGGAT CTGGGCAGGA ATAAACCTCA ACAGTGATCA      240
TGTTGACCTT GAGTGACAGG GTATAATGTT TGGGAAGGTG CTTTGTAAC TATAAGGGGC      300
AATACAAACA TGTAGTACAC CTTCTCTGAG ATCCGGGAAA GGACAACCTG AGCATAGGTT      360
GGGGCTGGTC ATAGGCCACT CTCCCCTACT GTTCTCTAG AGTGTGTGTA GTCCCTAGCA      420
AGTCTCAGAT GCCTCGACCT TCATGGCCTA GAGAGTCTC ATCAGAACAG GAAGGCAGTG      480
ATGATCCATT GCATGGGCAG GATTGTTCTA CGAAGACGAA GATCTCCGGA AAGTGAAGAA      540
GACCCGGAGG AAACCTAACCT CAACCTCTGC CATCACAAGG CAACCTAACA TCAACAGAA      600
GTTTGTGGCC CTCCTGAAGC GGTTTAAAGT TTCAGATGAG GTGGGCTTTG GGCTGGAGCA      660
TGTGTCCCGC GAGCAGATCC GGGAAAGTGA AGAGGACTTG GATGAATTGT ATGACAGTCT      720
GGAGATGTAC AACCCAGTC GACTCGAG                                     748

```

(2) INFORMATION FOR SEQ ID NO:1193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1193:

```

GAATTGCGAA CATGGCAGCG CGTTGGCGGT TTTGGTGTGT CTCTGTGACC ATGGTGGTGG      60
CGCTGCTCAT CGTTTGCAGC GTTCCCTCAG CCTCTGCCCA AAGAAAGAAG GAGATGGTGT      120
TATCTGAAAA GGTTAGTCAG CTGATGGAAT GGAATAACAA AAGACCTGTA ATAAGAATGA      180
ATGGAGACAA GTTCCGTCGC CTTGTGAAAG CCCACCTAA TCTCGAG                                     227

```

(2) INFORMATION FOR SEQ ID NO:1194:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1194:

```

GAATTCGGCC TTCATGGCCT AGTATATATA TAAATACTG AGGATTAGG GCTGATGTAT    60
ATAAATAAAA TACTGATAAC TTTTTCCTT TCTTTTCTT TTTTITTTGA GATAGTGTCA    120
TGCTCTGTTG CCCAGGCTGG AGTACAGTGG CACCAAACCG CTAAGTGCAG CCTTGCCCTC    180
CCAGGCTCAA GCAATCCTCC TGCCTCAGCA CCCTCAATAA CTGGGACCAC AATTGCATGC    240
CACCAAACGC ACCTCGAG                                         258

```

(2) INFORMATION FOR SEQ ID NO:1195:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1195:

```

GAATTCGGCC TTCATGGCCT AATGAATTCT CATTTCCTGG AGGCTGAAGA TCTGTGCAGG    60
TGTCTGTGGC CAATGTTAAG CCTACGACTT TAGATGAGCT GGCATAAATC TTGGGAGAGT    120
TTTCTTGTCT GTGTTCCCTC TGAATTCTC TGTGCTGTTA GAGGCAGGGA CAGAAGAGAA    180
CCAGCATGGC AGTGTGCGGC TCAGGGTGAT GCCTGCCTGC CAGCACAGCG GTTCTTGTC    240
CTGTCCACA TTGCTTCTTG GAAGCCTTTT TACAGCCTCA ATCATCTTGC TTTTCTACC    300
GCAGCTATCT CGAG                                         314

```

(2) INFORMATION FOR SEQ ID NO:1196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1196:

```

GAATTCGGCC TTCATGCGGG GACTTCCACT CTTTCTCGTT TTCTCGGAGC TCCGCCTCCA    60
GCTCCTCTAT CTTCTCTTTC AGCTGCGTGT TCTTCTCCTC TCTGTGGATC TCACGGCCTC    120
TTCTCTGTCT CCACGCTGGC CACCGACTCC TGCAGCGCCG TGGGCAGCCG GCGCTCGCTC    180
TCCCGCCGGG TCTGCAGCTC CATCTCCAC CTCTTCCCGT GGGCAGCTCT CTGCGTCGAG    240
GCCGCCTTCA GCTTGTGGTT CCCAGACTGC AGGTGCGTGT CAGCTGCAGC GGCCTGAGAG    300
GCCTTTCATC GTCCGTCCCG TTGACACTGG ATGCCGAGT AGAAGATGGG GCTCCATGCC    360
CGGATTCTCG GGATTATTAC TCGAG                                         385

```

(2) INFORMATION FOR SEQ ID NO:1197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1197:

```

GAATTTGCAG TGAACCGAGA TTGTGCCATT GCACTCCAGC CTGGGCAAAA GAGCAAGACT    60

```



```

CCATTTCAAA AAAAAATCTT AAAAATACGA AGTTTTTCAT TTTTCTTAAA TTTTCATTGT      120
GACTACTTTA GTAGACTTGC CAGTAATAAG CCAGTTACCG CTTGAATCTC AGTTTCTTTA      180
TCTGGAAAGT GGTCAATTATT TATCTGCTGT CCCCTTACCT AGAGGGAATC AAATGCGTTT      240
GATACAGGTT CTCGAG                                         256

```

(2) INFORMATION FOR SEQ ID NO:1198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1198:

```

GAATTCGGCC TTCATGGCCT AGAGAGCCCA TCTCCATCTG CCAGCCTGGA AGCAGCCATG      60
GCAAATGGGA TGTGTCCCAC TGCCCCCGTT TGGTGCCACA GTTGGGTTTA TTCTCACAGC      120
TGCAAACCCA CGTGCTGGGC TGCACAGCTG CCTGAACGAA GCTGGAGCGT GCAGAACAAA      180
CTGCATGGAA TGTACGTGG GGTTTTCCAC TCTCGCCAC AGTGAGTTGG CAATGCCTGG      240
CCACGTGTGC TCTGTGGTCT TTGAACCTGA TCTGGGAGGA CAGAANTCA AAAGGAAGAT      300
GAAGGCCCCA GCAAGGGAGG TATTCCTGTC TTGAGCAGAA GGTAAAGGTA GAAGGTGCAG      360
ATTAGGTACT GGAATAGTC ATGGTTTGGT TTGAATGGAG TAGAAGATTC CAGAGGAAGA      420
CGAGTGGGGC ACAGTGGCTC CTCGAG                                         446

```

(2) INFORMATION FOR SEQ ID NO:1199:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1199:

```

GAATTCGCCT TCATGGCCTA AATTGTAGCT AGGAAAATAA TATATGTCTT AGTTTAAGAA      60
CTCATACTCT GGAATCAACT CATTGCACTT TCCTATATGT TTGGCCATGG GCAAAGCACA      120
TAACCTCTTA ATCAATTGGC TCGTCTCCAA GGTGAGGATA GTTATACTTA ATCCTCTTTA      180
GGAGTGAGAA TAAAAATTAA ATATGTGTGT AGCATAGTGT CTACAATGTT AGAGGTATTT      240
GAAAAGTGAT AGTTTATTTT TTGGAATTAT TTAGCATTAT TAAAAACAAG GGGGAGCACA      300
CGGTGGCAGC TTTCTGGTCC CAGTACTTGT GGAAGCTGAG GTAGTAGGAT CGCTTGAGAT      360
CCGCTCGAG                                         369

```

(2) INFORMATION FOR SEQ ID NO:1200:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1200:

```

GAATTCGGCC TTCATGGCCT AGACAGGTTG CTAGCTACAT GGGTCTCTGA AGAAGAGTTT      60

```

```

TCCAGCAGAA GGAGCAACTA GTGCAAAGCC CCTGAGACAC AACTGCACCT ATCCAGATTA    120
AGGACCACGG AGGAAGCCAC TGTAGGAGCA CAAAAAAGT AGGAGATGAA CAGAGAGGTG    180
AGGGAGGCTC CGTAGGTCCT AGTATGCACT TTGGCATTTA TTTACTGATT GAGATGGCAG    240
GTCATTGGAG GATTTCGGAGC AGAGGAAGGA TATAATCTGA CATTTTAGCA GGATCCCTTT    300
GAGTAAGTTA GCTGCGTAGA CCTAAGATGA ACAAGGACAG CCACAGCAAG ACCTGTAAGG    360
AGACTATCCT TGTAATCCAG GCAAGAGATG ATGGCAGCTT GGACCAGGT AGTAGCAGTG    420
GAATTGATGA GAAGTGTTG AAATCTGGAT ATATTTTGAA GATGGAGCCC ATGGGGTCTC    480
GAG
483

```

(2) INFORMATION FOR SEQ ID NO:1201:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 192 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1201:

```

ACCATATAAT TTGCCACTTG AAGGTACAA ATTCAGTGAC TTTTAGTAA TTCACAGTTA    60
TATATTCATT AGGATATTCA GAGTTATATA TTCATCACCA CAGTCACTCT TAGAACATTT    120
TAATAACCTC AAAAAGAAAC CATGCACTCC TTAGCCATCA CTCCTAACCC AACTCTCCCT    180
CTACCGCTCG AG
192

```

(2) INFORMATION FOR SEQ ID NO:1202:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 281 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1202:

```

GAATTCGGCC TTCATGGCCT ACTTTAAACA TGTGGTCTTA CTGCCTGCAA ACACATACAG    60
ACTCTTAATT TTTATTTACA TAGATGTAAA TATACACATA TATTACTCTA AAGATAAACC    120
TTAAGGGTAA GAAAATTATA AAGTATGTGT GTTTNTGTGA ATATGAATTT GTACCTATAT    180
TCAGAAGAAA AGAGCAATAT TGGCACAAA CAAATCATCT TAATAAGGTA ACTAATTGGN    240
TGNGTGCACT GGCTCAGGCC TGTAATCGCA TCACACTCGA G
281

```

(2) INFORMATION FOR SEQ ID NO:1203:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 328 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1203:

```

GAATTCGGCC TTCATGGCCT AGTGATCTAC TTAGGTAGCT CCTGGAAAGC AAAGGAGAGA    60
GAGCAAGACC TGTACAGACT TTGTTTATGA GGAAAGCTAT ATAAGGATTA TAAGAACTGA    120
TAAATATTTC TTGTTTCCT TTTTGACAAA ATGGATTTC TTCAGTTTCT TAAGCAGATG    180

```

TATTATTCT GGGACGTTT AGCCATGTAG TTTCTTTTTA TTCCTCTTTG ATACCCTGAA 240
 TAACTAGCCT TAGAAACACA AGTAAAGCTC CCAAAATTC ATTTTCTACA TATTTTATTA 300
 CCAGATTGAA TTCTAGACCT GCCTCGAG 328

(2) INFORMATION FOR SEQ ID NO:1204:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1204:

GAATTCGGCC TTCATGGCCT AGGTCCTAAA AAGAGTAAAA GGTGAAAACA CTAAGTGATA 60
 TTCNAAACAA AAGAAAAAGA TGAAAAATAA GAACCTTGGT TAAAGAGCAG TCGAAATAAG 120
 TAATGATTAT AGCTATGATT TATATAGCAC TTNTTACAAG AAGCCAGGCG CTGTTTAA 180
 CACTTGACAT ACTTATTGTC TCATTTCATA ATTGTAACAA CCCTATCAGA TAGGTACTAT 240
 TTTTATCCCA CTTTACAGAG GAGAACTGA GGCACAGAAT TTTAAGTGAT TTGGCCGGGT 300
 GCTCGAG 307

(2) INFORMATION FOR SEQ ID NO:1205:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1205:

GAATTCGGCC TTCATGGCCT AAAAAAAAAAT GTAGTCTAGA AAGAGACTAG GAATAGAACA 60
 CTGCTGACTT GTTCTTATAC CAAGAGCTGG AGGCATAAAC AGTTTAAATA AAAAAGAATA 120
 CTTTGTATCT TTTGATGTAA CTCCCTTTA GAGATTCTGT TTCCCTGTC TAAATGTGTC 180
 AGGCTATTTC TGATTGCTGT TTAATAAATT GGTAGTTACT ATTTGAGTCA NGCTTCTTAA 240
 AAAAAAAAAAG ATATAAAAT TCGCCAGCTC AGCTTTCATT TAATTAGTAT CAAAGAAATG 300
 ATATCTGTGG CAGTGAACAT TAGTAGCTTG TTCCAGGGTT TATTGTAGGT TTGTTCAAGT 360
 CAGTACTGCC CATCTTGGCA CTTAGGTTCT TGGAATACAG AGGTGGATAA GGTTCGCC 420
 TCGAG 425

(2) INFORMATION FOR SEQ ID NO:1206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1206:

GAATTCGGCC TTCATGGCCT AAGACCAGCA CCATCGTGAG CAAGATTCTT GTCGCGCTGC 60
 TTCCAAAATG GAAAAGCATC ACACTAAAT ACCTAATATC CTACCAAACA AACCACAGTC 120
 CCTACGTAGC CTTACTTCAG TCCCAGGAGA AGGAATCCAT GAATGGGCTG AGGTTCCGAG 180

```

GGTAGGTTGT GGATGTCCTT CTCTAGAGGG GTCCACACACC TGGAAAAGAG GACACCCAGC      240
CCGNGGGATG AGGGAAGCTG GGCAAGGGAG AAAGTTGTTG AGTCACACTG GGGACCCAG      300
ATGTAGTGAG CTCAGCAAGA AAAGCCAGGT CCAGAGAGAG TCGCACAGAA TTCCTGACTC      360
ACAGCGCCCC TCGGTCCACA GTGGAGAGGA GGAGGAGGAG GAGCAGAAGG AGGGGGAGGA      420
GCTGCAGGAG GAGGAGGATT TGAAAGCGCT TTGGCCTTGT GTTATGTTTT GCTTCTTTTC      480
TGTGCCCCCC TCTAGGCCAT GAAG                                          504

```

(2) INFORMATION FOR SEQ ID NO:1207:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1207:

```

GAAATTTTTC AGTAACTCAG TGTCTTAAAC TAATAATTTA ATCATTCTAG TAAGAAAACA      60
TGCTTTGTAT GATTTTAGTC TTTACATTTA TTAATTTATG TAAATTAATA TGTGGGTTTT      120
ATGATCACCC ACGACATTGT CCTAACTTGT CGACTGTCTT GTGTGCTCTT TTAAGAAGG      180
TAGTCTGTTG GCCGGGTGCG GTGGCTTACG CCTATAATCC CAGCACTTCG GACAGGCTCG      240
AG                                          242

```

(2) INFORMATION FOR SEQ ID NO:1208:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 152 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1208:

```

GTAGAATTGT ACAGTGCTTA TGAGTTATGC ATGTGTTTCT GGTCTTTGTT CTAGGATTTT      60
TTTTTTTTTT TGATTGCTGC TCCAGTTGCC TTAATTACTT TGACATTGGA GTTGACCACA      120
TGATGGTGTT CCACACTTCC CTTAGGCTCG AG                                          152

```

(2) INFORMATION FOR SEQ ID NO:1209:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1209:

```

GAATTCGGCC TTCATGGCCT ACTACCCCTT TATCATTCAC TAACGTGAAT GTGGTGCTAA      60
TTTTTCAGT CCATATCTTT GAACTTTTGG TAATATATGC ACATCAATAA GCAATCGAGT      120
TTTATCTATT CTAATTGTTT TAATGTACAA CTTTATGGGT ACATGTGCAA TTTGTGTTCT      180
TGCATGGTGG CCAAATCAGG GCTTTTAGAA CATCCAACAT GCGAATAATG TACATTGTAC      240
CCATTAACTA ATTTCTCAAT ACTTCTGAGT CTTCTTGTG TATGATTCCA CTCTCTACAT      300
CACATGTACA CCTCGAG                                          317

```

(2) INFORMATION FOR SEQ ID NO:1210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1210:

```

GACAGATTTC ATTACCTTGA AGTTCACCTGC ACTGAACAAT TCTCACTCTG GATGTATTCC      60
TGCTCTAGGA TGTGAATTTA GACTTTTGTG ATAGAGTGGG CTTTGAGAAA TAGCTTTTCT      120
GCTCATTTTA GTTTCATGAT GACTGCATGG AATGTTTTCG TTCACGCTTA TGCATTGAGT      180
TTTATCAAGC ATTAAGCAGT TGGCCGAAAC AGGTAATACT TGAACATTCA GTCCAAGAAA      240
AACAAAATGG ATTTGAACAT ACGTAGAATC AGTAAACTCG AG                          282

```

(2) INFORMATION FOR SEQ ID NO:1211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1211:

```

GAATTCGGCC TTCATGGCCT AGTCAAACCC TAGAGCAATG CAGGCCTTGT TACAGATTCA      60
GCAGGGTTTA CAGACATTAG CAACGGAAGC CCCGGGCCTC ATCCCAGGGT TTA CTCTGG      120
CTTGGGGGCA TTAGGAAGCA CTGGAGGCTC TTCGGGAAC TATGGATCTA ACGCCACACC      180
TAGTGAAAC ACAAGTCCCA CAGCAGGAAC CACTGAACCT GGACATCAGC AGTTTATTCA      240
GCAGATGCTT CAGGCTCTTG CTGGAGTAAA TCCTCAGCTA CAGAATCCAG AAGTCAGATT      300
TCAGCAACAA CTGGAACAAC TCAGTGCAAT GGGATTTTGT AACCGTGAAG CAAACTTGCA      360
AGCTCTAATA GCAACAGGAG GTGATATCAA TGCAGCTATT GAAAGGTTAC TGGGCTCCCA      420
GCCATCATAG CAGCATTTCT GTATCTTGAA AAAATGTAAT TTATTTTGA TAACGGCTCG      480
AG                          482

```

(2) INFORMATION FOR SEQ ID NO:1212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1212:

```

GAATTCGGCC TTCATGGCCT AGGGTGATAT TTAATCGTT GCCAATGGCT AAGCTCCAGA      60
CTTTGCCTCT CACTTGTGA GGGATTCCCT GCCACCATAA ATCTCGAAT TTTCTAGAGC      120
ACCACATTGT TTCCAGTTA GGTAAGATCT CATTATTCCA GGTGAGCACA GCGTTTCCAA      180
TGCTTTCCTC GACTCTGCAT CTTTCTTCCA GCTGCTTCTT CCTTCGCTGG GCTTCTTTCA      240
GCTCTCGCTT TTTGGCCTGA ACCACCATTT CTTCATACTG CTGTCTGTGC TTCTGAGCTT      300
CTTCAGCTGG TTTTGCTGGG AGATTGCTG GTCTGTCCTC GAG                          343

```

(2) INFORMATION FOR SEQ ID NO:1213:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1213:

GAATTCGGCC	TTCATGGCCT	AGAGAACTA	AACTCAGAG	AAGTTAATTA	CTGAACTCAA	60
GATCCCAAAG	TGCTGGGATT	GCAGGCGTGA	GCCACCGCGC	CTGGCTGAAA	GAGCTTTTTT	120
AATGTATTAT	TTATTTGTGT	CAGGATAGAC	TCATTGATGC	GTGTTTTATT	CAGTGGGTAA	180
TAATTCTTTA	TTATGTATTC	TGATGTTGGT	GTTTTCCCAG	TTTTAGCCAA	TGGCATCCCC	240
TTCCATCTGG	ATCCTGTGTT	CTTTTGACAT	GGCTCCAATC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:1214:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1214:

GAATTCGGCC	TTCATGGCCT	AGAACCAGGC	CTTCCAGTAC	GAGTTTGGAG	CCATGTATGC	60
ATGGATGCTG	TGTGTCTTCA	CTGTCATCGT	GGCCTACAGC	ATCACTTGTC	CCATCATCGC	120
GCCATTTGGC	CTCATCTACA	TCCTGCTCAA	GCACATGGTG	GACCCGCACA	ACCTCTACTT	180
CGTCTACCTC	CCAGCCAAGC	TGGAGAAGGG	GATCCACTTT	GCCGCTGTGA	ACCAGGCCTT	240
GGCAGCCCCC	ATCCTGTGCC	TCTTCTGGCT	CTACTTCTTT	TCCTTCCTGC	GCCTGGGTAT	300
GAAGGCCCCC	GTCATCTGAG					320

(2) INFORMATION FOR SEQ ID NO:1215:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1215:

GAATTCGGCC	TTCATTTTGA	AAGATATTTT	TGTA AAAATC	TGTTTGTTTT	CTTTTAATAC	60
TTTCCAGTGT	TATCTGGGTT	TCTTAATTTT	TGACTTAAGG	TCTGTAATAA	TTTCTGCTTT	120
CATTCCTCTT	AATATATTGT	GTCTTTCTTT	GTCTACATTT	AAGATTTTAT	CTTTATCAGC	180
TGTTTGA AAA	AGTTTATTTT	TGATGTGCTC	TTTATGTTTT	TCTTTATTTG	TAGTGCTTGG	240
ACCTTGTTGGT	GCTTTTCTTA	TTTATAATTT	TCATCAAATT	TGGGGGGTTT	GACCATTATT	300
GCTTCAAAAA	TAATCTCTGT	TCTTTTCTTT	CACTTTCTCC	AGTTACATAC	TGTAGAGTAA	360
ATGATAGCTA	CCGAAGACAG	AGTGATCCGT	GATAAATATC	ATTAATGCCT	CTGAAGAGGA	420
GAATGACTCC	AGTGAACCA	CTCGAG				446

(2) INFORMATION FOR SEQ ID NO:1216:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 263 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1216:

```
GGACTTTTGG GAGAAGCAGT ACTATTCATT AATTAAGTAT AGAGTGTCTT GTTAATCCTA    60
AAAGAAAGAG AGCCTTAATG AGGATCATGA ATTTTTTTTT TTTTGGGATG    120
GAGTTTCGCT CTGTGCGCCT AGGCTGGAGT GGGGTGCTAT CTCTGCTCAC CACAACCTCA    180
GCTTCCTGGG TTCAAGCGAT TCTCTGCCT CTGTCTCCCG AGTAGCTGGG ATTACAGACA    240
TACGCCGCCA TGCCCAACTC GAG                                           263
```

(2) INFORMATION FOR SEQ ID NO:1217:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 325 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1217:

```
GAATTCGGCC TTCATGGCCT AAACAACAAC AATAACAACA AAAAAACAT GTATAACTGG    60
GAAAAAAGTG AAAGAGAATG CAGGATCATA AAAATATAGC AAACAAAGTG AGTGGGATTT    120
AAAATTAGTG GAATAAGAAA TAATGGGTAA CAATGAAGAA CATAATTTAG GTAATAGTAT    180
AGTATCTTGG GAGCCCTCCT GGAAGTATCT AGTTATGGAC AGTGAGCAGC AGAAACAGGA    240
TGTAACCTAA TTCAGCATAC TTGATGGTTG TGGAACCCCT AGAAAATGAC TCCAGGAAAT    300
AGGTGAGAAT CCAATCTATC TCGAG                                           325
```

(2) INFORMATION FOR SEQ ID NO:1218:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 293 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1218:

```
GAATTCGGCC TTCATGGCCT ACAGAGATAG GGTCCCATCC AGGTTCTTAA CTGGGTGGCA    60
CATGCATGGG CTAGATCCAA ATAGCATTGC AAAGGCCTGG AAAACAGAAC TAGAATTGAA    120
ACCACCGCGG AAGACTCATT CGAACTCGTG GGCTGAATC AACCAGGTCA ATGCTTCAGA    180
AAAATACCAG CATTCTCCAC AGGACATAAA CAAGATTGTC TCATAACATA CCATTCAAAA    240
TATTAGGATA CAATCCAAA TTGCTCATCA TAAGAAGACA GGAAAACTC GAG                                           293
```

(2) INFORMATION FOR SEQ ID NO:1219:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 265 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1219:

GAATTCGGCC	TTCATGGCCT	ACGAGGATTG	GGGTAGGTAT	GNGCTTTNGG	CTCATGTTTG	60
TGATGATAAC	TGAAGTCTNT	TGTGGGTCCG	ACCTGTTGTA	GGGTGTGGGG	GAAAGTGAAG	120
GAAGAGAATG	AAGGTGAGTC	CCGCCGTTG	CAAACCTTCA	CCAAACCACG	CGGCCAGTT	180
TTCGTGAGTA	CCCCTGTGTC	CCAGAGAGGA	GGACCCAGCG	TCCTCGGCTC	TGCCGCAGGC	240
CTTCTTGCTC	TGGTGGGTAC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:1220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1220:

GAATTCGGCC	TTCATGGCCT	AAGGAATTGA	AACCCAGTAC	TTTGCAGAAC	TTCTTATGAC	60
TTCTGGAGTG	GTCCTCTGTG	AAGGGGTCAA	ATGGTTGTCA	TTTCATAGCG	GTTACGACTT	120
TGGCTACTTA	ATCAAAATCC	TAACCAACTC	TAAGTGCCT	GAAGAAGAAC	TTGACTTCTT	180
TGAGATCCTT	CGATTGTTT	TTCTGTCTAT	TTATGATGTG	AAGTACCTCA	TGAAGAGCTG	240
CAAAAATCTC	AAAGGGGGAT	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:1221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1221:

GAATTCGGCC	TTCATGGCCT	AGCTCATTCT	GCTGGGGGTA	GAGATGAGGG	GAGGGAGTAA	60
GTTAAACCTT	GGACTAGCAA	GTAGAAGCCT	GGGGGGATGC	GTGTGCCTCA	GTTTCCTCCT	120
CCACAACCTG	ATATAGTGGC	TGAAAACCTG	GGAGATACTT	GATGGCGCGA	ATGTCCGTTT	180
TCTCTCCCTT	CCCACCTCCT	GCAGGAAGCA	GGACGGGGCA	GGCAGCACCT	GGTAGGCACA	240
GTGCTTTGCC	CCTCCTCCCC	TTCCCTTCTG	GAAGTCTTGG	GGCCTCAGTG	CTTGCAACAG	300
CCACTCCTCG	AG					312

(2) INFORMATION FOR SEQ ID NO:1222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1222:

```

GCGATTGAAT TCTAGACCTG CTGGCCTCAA GTGAACCTCC CGCCTCGGCC TCCCAACGTG      60
CTGGTATTAC GGGCATGAGT CATGTGCCC AGTCACAGAA TTCATTTTAT TTGTGAAAAAT      120
ACAGTGGTAC AAGTAGGCCT TTGTAAATG ACTAACCTGA AACCTCTGTG GAATGACAAA      180
CTCCTCTCTA CTCAAATAC TGGCCCATCC CTGCTTAAAT ACTGCTCAAT GAAGTTACTC      240
ATGCTAGTTC TTGAGGGAGT AACTCTAGAA TGATTCCATC TAGGAAGACA TAAGATAAAA      300
TGGTAAGTAT TCTAAGTTCT ATAGGTAGTT TAGTCATGCC ATATTATAAA CCTCCACTCC      360
AAAAATAGTG TGAGGTCATT TCTGGCCAGA GTGAAATAAA AAATGTATAA TGCCTGAACA      420
GTCTATTATT CTGACAATGA AAAAGATTAA TGCAGTTCCT TTTATCACTT GCATGAGTAA      480
AAAAATATAT ATATATATTG GCTGGGCTCG AG                                     512

```

(2) INFORMATION FOR SEQ ID NO:1223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1223:

```

GGGTGTTTCA TACAAAGAAT ACAAGTAACT GATGAATGAA GGGGGCATCT TGTGTCCCCA      60
CAATCCTGCT GTGCGCACAC CACAGGTGAG CCGTTCTGCC TAAGGGAACA GCCCCGGCCC      120
CTCCCTCCGG CTCTCCCCA GCACCGTCTC CTCCACCCAG TGGCCTGGCC GTGGATGCTG      180
CCTGTGGCCC AGCTTTGAGA CACCGCCCTG ACACGTGTCC AGCCTTACGT GGAAGGATTT      240
GTCTGTTTGT TGGCATCCTA GTAGATGCCA CGTTAGTAGA TGCCATGTTA GTAGAAGGGA      300
TGTGGGCATT TCTTTGTAAG TTCCCAAAG CCTATGAGGG TTTTTCAC GATTCCGTTT      360
CCAGTTTGGC TTTTGTGTT GTTGTGGCTG TTCTTGGCCC CCCTGGGCCC TGCAGTGGAG      420
TGGGGGGCTG CACCTGGGAG CCTCGAG                                     447

```

(2) INFORMATION FOR SEQ ID NO:1224:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1224:

```

GAATTCGGCC TTCATGGCCT ACTTGTTTT ATATAATAAA STATGCCTGT TATATTAAAT      60
AATAAGAATA TGGCAATTAG CGATATAGCA TACCCAAACA AAGATGTTCT CGATACAGTC      120
TGGCAAAGAC TATCCCAAGG TTATTTTAAT GAATTCAGAC ATTTTTCCT GTGGATATTT      180
CTCCATCCTA AAAAAAGTGG CAACCAAGGA AAATATTTAG ATGCAAATAC TCGAG          235

```

(2) INFORMATION FOR SEQ ID NO:1225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 134 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1225:

```

GCGATTGAAT TCTAGACCTG CCTCGAGACT GACGCCGCAC CATGACCCTC CTGCTGCTGC      60
CCCTTCTGCT GGCCTCTCTG CTCGCGTCTC GTCCTGTAA CAAAGCCAAC AAGCACAAGC      120
CACCGCATCT CGAG                                     134

```

(2) INFORMATION FOR SEQ ID NO:1226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1226:

```

GAATTCGGCC TTCATGGCCT ACACACATCT GGTAAGCAGA AGCACGGAAG GCCTTTGTTT      60
CAGACAATCT TTAAATGAT GTTTGTATAG GGAACAGCTT TGAAGATAA AGAATGTCTC      120
TCTCTCTTAT GGTTTGAATG TGTCTCCAAC ACTTTATGTG TTGAGACTTC ATCCCCAGTG      180
TAACAGTATT GGAAGTGGA GCCTTTAAGA GCTAATTAGG TCATGAGGAC AGCTCGCTCA      240
TGAGTTGACT AAAGCTGATA ATGTGGGAAC GTGTTGGTTA TCACAGGAGT GAGTTCCTGA      300
TAAAAAGAAT GAGTTTGGCC AGATTGTCTC TGTCTGTCTC ATCTGCCTGC TTCCACCTTC      360
TGTAATTCCA CCTGGAATGA CCCTCACCGG ATGCTGGTGC CATGCTCTTG GACTTCCCAG      420
CATCCAGAAC TTCTGTTTTT ATAAATTACC CAGTCTATGG CATTCTGTTA TAGCAGCAGA      480
AAATGGACAG AGACACCCTC AAATTAAAGG ACAGTCTTGC TGAATATGAA TTAGAAAATA      540
TCTGGGTTAG CTCGAG                                     556

```

(2) INFORMATION FOR SEQ ID NO:1227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1227:

```

GAATTCGGCC TTCATGGCCT ACCTGCCTCG AAATACTACC GTATGGCCCA CCATAATTAC      60
CCCCATACTC CTTACACTAT TCCTCATCAC CCAACTAAAA ATATTAAACA CAACTACCA      120
CCTACTTCCC TCACCAAGC CCATAAAAT AAAAAATTAT AACAAACCAC TCGAG          175

```

(2) INFORMATION FOR SEQ ID NO:1228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1228:

```

GAATTCGGCC TTCATGGCCT ACTGTTTCCT TGCCCTTTTC ACCGTCTGGT GGTTCCTGTC      60

```

```

AGCCCTTGGC TTGTGGCCCT CTCATCCATC TTCCGAGCCT AGCACTCCAG TCTCTGCTTC      120
TGTCATCACA TCGCCTTCTC TTGAGAAAGA TCCCAGGCTG GTATTTAAAT TGCCTGTGG      180
CAGGAACCTT GCCTGTCTTC CCCTACCCCC ACAGCTCGAG      220

```

(2) INFORMATION FOR SEQ ID NO:1229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 526 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1229:

```

GAATTCGGCC TTCATGGCCT AAGTCTCTTG ACATCTCAAT TTACCCAGAG ACATCTCTAT      60
TTAATTATTC CCTGAGGAGG GGAAGTTGGG TATGGCGGTT GGAGGTGGAC AGGCTCCTAA      120
CAAGCACTTG CCAGCAGGGG GCACTCCAGG TTTTCGCTCC GCTGAGTCAC CCAACCCCTG      180
AGGCTTCGCC ACTTTCTAAT GTTTGCTGTG GCTACAATGG TCAGACCCAC AGGCAAAAAA      240
GTCGAAGTCC CTGGAGTCCC TGACCCCTCT TCCTCTCTAT AACGATTGGA AACTGTCCAA      300
ACCAACTCCA GTAGTTCTGG GCTGATGAAT CATCCTCTTG TGGGGCGGAG AGTGGGGGTA      360
GGGTGGAGCA ATGTGGGCTA GGACCCAGGG CAGGATCAAA ATCTCTGAAG ATGCAGAGCT      420
CCCTCTGCCC TGGGAAGAAG GAAGCAGGAT TTATTATAAC ATTTAGCTCA CTGTCCAATC      480
GACTAAACA AGCTCTCCA GGGCTCGGC CAACTGTCGA CTCGAG      526

```

(2) INFORMATION FOR SEQ ID NO:1230:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1230:

```

GAATTCGGCC TTCATGGCCT ACCATTGGGC TATGACCTGA GGAGAATCAA GGTAGCTTTC      60
TCAGGCCTCG TGGACATCGT GGATATAAGG AATGCTCTCG TAGGAGGGTA CAAGAACCCC      120
AGCATGATTC CAATAGAGAA GGCCCAGGGG CCCATCCTGC TCATNGTTGG TCAGGATGAC      180
CATAACTGGA GAAGTGAGTT GTATGCCCAA ACAGTCTCTG AACGGTTACA GGCCCATGGA      240
AAGGAAAAAC CCCAGATCAT CTGTTACCCT GGGACTGGGC ATTACATCGA GCCTCCTTAC      300
TTCCCCCTCG AG      312

```

(2) INFORMATION FOR SEQ ID NO:1231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1231:

```

GAATTCGGCC TTCATGGCCT AGCTTTATCC ACTCTGGAAT CCTGGAGGAG CCGCTACAAC      60
CAAGTTGTAA AAGAAAAGGG AGACCTTGAG NTGGAAATTA TTGTCCTGAA TGACCGGGTA      120

```

```

ACAGATCTTG TAAACCAACA ACAAACCCTG GAGGAGAAGA TGCGGGAAGA CCGGGATAGC      180
CTGGTGGAGA GACTACACCG TCAGACTGCT GAGTATTCCG CATTCAAGCT GGAGAATGAG      240
AGGCTGAAGG CCAGCTTTCG TCCAATGGAG GACAAACTCA ACCAGGCACA CCTCGAG        297

```

(2) INFORMATION FOR SEQ ID NO:1232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1232:

```

GAATTCGGCC TTCATGGCCT ACGCAGCTCT ACCTGCTCCA GGGGCACCTG GACCTGTGTG      60
AGCAGCACTG TGCCATCCTC CTGCAGACTG AGCAGAACCA TGAGACCGCT TCTGTGAAGT      120
GGAAACTTG AAGACATTCC TGCTTCTTT GAATTGGCCA AGAAGGTGTC TAGCCGGGTG      180
CCTTTGGAAC CAGGGTTCAA TTACTGCAGA GGTATCTACT GCTGGCAGAT AGGGCAGCCC      240
AACGAAGCCT TAAAGTTCCT GAACAAGGCA CGCAAGGACA GCACTTGGGG CCAGAGCGCC      300
ATCTACCACA TGGTGCAGAT CTGTCTGAAT CCAGACAACG AGGTTATGGT GCGGCTCGAG      360

```

(2) INFORMATION FOR SEQ ID NO:1233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1233:

```

GAATTCGGCC TTCATGGCCT AGAAGGACTG AAATGATGTT ATACTAAGGG CTAAGTGAAT      60
TTTTGCCTGT TCTTCCAGG TGTGACAGCC TTTCTTTTC TTCCAGGTG GTTCGCTTTG      120
AGGTGGTCTG AAGCCAAGGC CTCGCGGAGC TTCTTTGTGT GTCACCTTGC TTCCACGTTT      180
CAGTTCTTGT TTTGTTTCTA CTGCTTTAGT TTTTTTTAAA GTTCTCCAGT GTCCCAAGA      240
GGTATTAGAA TCTTGCTGTA CCAAGCAAG ACGTTAATT TTCTTTTAAAC TGTTTTGGGG      300
AGGGAGGGAG TGATAGCTTA ACTGCTGAAG CCAGGCGGGG GTCTGCTGGA GGATTCCAAC      360
AGAGAGTATT TCCTCCACTG TACAATGTCA CAGACTATCT CTATCATCAT TGCTTTGTGG      420
CAT                                                                    423

```

(2) INFORMATION FOR SEQ ID NO:1234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1234:

```

GAATTCGGCC TTCATGGCCT AGCATGTAAA ACTTCAGTCC TGAACATTTA TAGGGTTTTA      60
TAGAAGGGCA TCCTCCAGGG CTGGTCCATT CAGAGAAATG CTGCATGCTG CCGTCATGGA      120
ATGTGGCCCA CAGGACACCA GAGCCGTGAG AACCGGAGAG CAGACTTCCC TCACGGCTGG      180

```

```

GCTGAGCAAA CCCTCCAAAG CCCTCCTCAC GCAGTTACTA ACAATAGCAT GGGCTTACAG      240
CACAAAGCAG TGTTCTCACC TTTTCTCTAT GCCCTGGACT AAGGTTTGGC CAGTGTATC      300
ATATAAGGCC ATCCTGACAT TGTTTCTGTG TTCAAAATT TGGATTTTAA TTTACATTAG      360
AACTACATTG CTCCTAGTAG AACATTACCT TTAGGGGACT AATTTTCCAT GGAGAACTAT      420
TTCAGCATAT TGCATGCTGC TCAGACCCCA AGTCAGATAT GCCCACAAGC TCGAG          475

```

(2) INFORMATION FOR SEQ ID NO:1235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1235:

```

GTTTTGAGCC TAGTAGCACT ACCTTCCAAG TGAGTCACAA CAAATTTGAT CCTATTTGGT      60
ATGTTTTTGT CCACTGTTAT GATTNATCAT GTATCTTACA AGAGCCACTC AAGCAAGACT      120
CTGCTTCTAT GTATGGTGAG GCCTNGTTGT TCTAGGCTAG AATAAACTCT TTGTATGCCT      180
CATTGAATAT GCCAGGTAAA ATTTATGCAG TCAAGAATGA ATTATTTTTC TGACTAAAGT      240
GTGTAGCAGT AGTTCAAAAT TGTGCCCTTG TTTAACAGT TTCTGTCNAC ACCTTCTCGA      300
G                                     301

```

(2) INFORMATION FOR SEQ ID NO:1236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1236:

```

GAATTCGGCC TTCATGGCCT AAGAGAAGAT AACATTTACA AGTAAACAGT AAGTGCAATT      60
GTATTTTAAT TTCTTGGTCT CCGAAAACCTC AGCTGTGACT GCTTCCATT AACAGTTCCA      120
GCTCTATGTG TTTCTCTAA CGCTAAAGGC ACAGCCCCCG GGAATCTACT GCTTCTAAG      180
AGTCTCCATG GAGTCTATTT TACAACCTCC TTCCCTCCA TGCTCCGCG GAGGAGTCTA      240
TACTATCTCT ATATACACAT TTTAAACATT ATTCTTCATT TGAATTCCT TCAATAAAAA      300
CACAGTCACC ATTCTTCATC TTCTTGGGAA ATGGCCTGCT CTCGAG          346

```

(2) INFORMATION FOR SEQ ID NO:1237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1237:

```

GAATTCGGCC TTCATGGCCT ACTCACTATG TTGCTCAGGC GGATGTGGAA CTCCTGGGCT      60
CAAGCGATTG TCCTGCCTTG GCCCCCAAAG TGCTGGGATT ACAGGTGTGA GTCATGGCAG      120
CCACGGCTCC AGAGCTCGGG TTCTTAATCT GGTCTGTGGA TGGCCCCTGG GGGCGGTCCC      180

```

```

ATGAGCCCCT CACAATTGGA CACAGTTTGG CAAAGGGGTA AAAGGACAAG AATCGGTAGC      240
TGTGACTGTG GATGAGCCTC TGAGCTTCAC TTCCCTCCCC TGAAAGGGGG TGACAGTGGC      300
ACCTCCCTGG AGGTTTTCGT GGAGGGGAGG AAACACATGT AAAATACTTC ACCCC      355

```

(2) INFORMATION FOR SEQ ID NO:1238:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1238:

```

GAATTCGGCC AAAGAGGCCT ACTAGACCTG ATCACCACGT TCAAAAGTTG GCTTTCTCCA      60
TTTTAAGTTC TTCCTTAAAG CCTCTTTAAG CAAAGTCCCT GAAATGATAC AGTAGAAAAA      120
TCACACAGAC TTATTTAAAA TGAATTCTAT CACTATTCTT GAGATCTCGC CTGCCCCACT      180
GAGGACATTT TGTTCGCA AAGTGCTTTG AAATGTGATA AAGGATCTTA AAGAATATTT      240
GTAAAATTAT GCCCAAAGAA GACATTCTTT GAGGTAACT TGCAGTGTCT AAAAGTCAAG      300
AATGAGGAAG GAAAGGAAAA TAACAGATTC ACTTTAAAT GGACCACGCT AATTGGGCAG      360
TGAAACATCC TTGTGTCACA CCATTACCG TAGCAGACCA GAAGAGGGAA AAGGCTTGAT      420
TTTTCTCTCA TAGATACCAC AGTTCACCTC CAAAAACATT CCTAAAATGG ATTGATATTT      480
CTCTGATAGA GCACCTGTTT TGCTACTGAC AGTGTTAAGT TCCATACTAA TCAGCTCATC      540
TAGCCTAAG ACAACTCGAG                                     560

```

(2) INFORMATION FOR SEQ ID NO:1239:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 569 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1239:

```

GAATTCGGNC AAAGAGGCCT AAGGAGAANG AGGCTCAGAA GGAGACGATT AAGGATCTTC      60
CCAAGATGAA CCAGGAGCAG TTCATTGAGC TGTGCAAGAC GCTTTACAAC ATGTTTCAGTG      120
ANGACCCCAT GGAGCAGGAC CTGTACCACG CCATCGCCAC CGTGGCCAGC CTCCTGCTCC      180
GCATCGGAGA GGTGGGGAAG AAGTTCTCAG CCCGCACAGG CAGGAAGCCC AGGGACTGTG      240
CCACTGAGGA GGACGAGCCA CCAGCACCGG AACTGCATCA GGACGCAGCC AGGGAGCTTC      300
AGCCCCCAGC TGCAGGAGAC CCCCAAGCCA AAGCAGGCGG AGACACACAC CTCGGAACAG      360
CCCCACAGGA GAGCCAGGTG GTGGTGGAGG GGGGCAGCGG CGAGGGACAG GGCTCACCCCT      420
CCCAGCTGCT GTCTGACGAT GAAACCAAAG ACGACATGTC CATGTCCTCC TACTCGGTGG      480
TCAGCACGGG CTCCTGCAA TGTGAAGACC TTGCAGACGA CACGGTGCTG GTGGGCGGGG      540
AGGCTGCGAG CCCCACAGCG CGACTCGAG                                     569

```

(2) INFORMATION FOR SEQ ID NO:1240:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1240:

GAATTCGGCC	AAAGAGGCCT	AGAGACCAGC	CTGGCCAATA	CGGTGAAACC	CTGTCGCTAC	60
TAAAAATACA	AAAATTAGCC	AGGCATGGTG	GCTCACACCT	GCAGTCCTAG	CTACTTGGGA	120
GGGTGAGGCA	GGAGAATCAC	TGAAGCTTGG	GAGGCAGAGG	TTGCAGTGAG	CCAAGATTCC	180
ACCGCTTCCC	TCCAGCCTGG	ATGACAGAGT	GAGACTCCGT	CTCAAAAAAA	CAAAAAAA	240
GTTACTTCAA	TAATGTACTT	TTTTTTTCA	AATTACAGAT	AATCTATAAG	GAATTAATCT	300
TGAAATTAAT	TCCAGGTTTA	ATTGTTAATG	AAATTTTACA	AGCCTAATTT	AACACTTGTC	360
TGGATAACTC	ATTTTGATAC	TGAGTAAATA	GTACCCGGTC	TCGAG		405

(2) INFORMATION FOR SEQ ID NO:1241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1241:

GAATTCGGCC	AAAGAGGCCT	AGGGCTTTTG	TGAATAAATT	TTAAAAGAGA	CTACTGCCTG	60
TCCTTAAATT	CCTTTTCTT	TTTATAAAAA	AAGAACTATT	AAAAATGATT	GACAAATTTT	120
GAGTTAAAA	ATTGTAAAA	CATTCTCTAT	ATTTAATTTT	AATTTTATAA	TAGATTACAG	180
GAAGATGCTT	ATGAACAAAA	TACATTGTGT	TCAGTACATG	TCTTTAAATG	ATAGACTTAT	240
AAGTATGTAA	ACAACTATAT	AATAAAAGGT	TTCCAACGCG	TGCCTGTAAG	AAATCAGGCA	300
AATTTTACCA	TAAGCAATAA	ACCATTCCAA	GCCTTCCAGA	CAGTCTCCAT	AGCCGCACCA	360
GCATGGCAAT	AAGCTTTAAC	CAAACGAAAA	CAAACAAACA	AAAGCACTTC	GCAATTTGTT	420
GCTGCAAAAC	AGGGAGAGAA	AAGAGTGATC	AAACTTGATG	GAATCACAAC	AGTCAATATA	480
ATTTAAGGGA	CAATAAAGTC	AATAAGGTTG	ATGGTGTTTA	TTGTTTAAAA	AGTTAGGCCT	540
CT						542

(2) INFORMATION FOR SEQ ID NO:1242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1242:

GAATTCGGCC	AAAGAGGCCT	ACTGATACAA	TTGTTGACTT	TTCTTTTACT	ATGTGTAAGA	60
AATACCCCAA	ACATGAAAAG	ATTGTTTTGA	TCATATGCAT	GTATGTAGAA	TATTTTGTCA	120
GAGCAGAAAG	ATTATGTTAG	AAGTGTGATT	TTTATTTTCA	GAAAGTCATAT	ACATGTAAGC	180
TACAATTTTG	AGTGCTTTAT	AAACACTTAA	GATATATATA	TAAATTTTAA	TTTCATAGCA	240
ACTTGTAATA	AATAAAATAC	TTGTTGAAAA	GCCTTTTCA	ACATATCCCT	AAGCTAAGGG	300
AAGAGGAAGG	AATAACAAC	CAGTGAAAAG	ATGGTCTCCA	GTTTCTGAAT	GAAAAAGCTA	360
CAACCTCGAG						370

(2) INFORMATION FOR SEQ ID NO:1243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1243:

GAATTCGGCC	AAAGAGGCCT	AGCCTCATCA	CGGGCAGGGC	TCTGGCCCAT	AGTGGCTGGA	60
CAGACACTGG	CACAGTCTTG	CTGGTCTGCT	GGGAGCACAC	AGACATTGGC	ACAGACTTGC	120
TGGTCTCTTG	GAAGAGGGCA	AGACCCCAAA	CCAGAGCAAA	ATACACTTCC	AGCTCTTAAC	180
CAGGCTCCTT	CCAGTCACAA	GTGTGCAGAA	TCAGAACAGA	AGTAGTACCA	ATCAATGTCA	240
CATGAACAAA	CAAGCTGCCC	CCAGGGTACC	ATTTGGGGAG	GGGAAATCTT	TTCTTTCTTT	300
CCCCCTTAAA	AAAAAACACA	TCTGCCCGA	ACACTTTCCC	ACTGTTATTC	TTTCTCATA	360
CCCCAACGCT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:1244:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1244:

GAATTCGGCC	AAAGAGGCCT	ACACACCAAA	CTGATTATCC	ACCAGACACT	CAGCGTCTTA	60
GAAGATATTG	TGGAGAATAT	CTCGGGGGAG	TCCACCAAGT	CTCGACAGAT	TTGCTACCAG	120
TCGCTGCAGG	AATCTGTTCA	GGTCTCCCTG	GCCCTCTTTC	CAGCTTTTAT	CCATCAGTCA	180
GATGTGACTG	ATGAGATGCT	GAGCTTCTTC	CTCACTCTGT	TTCGAGGCCT	TAGAGTACAG	240
ATGGGTGTGC	CTTTCCTGTA	GCAAATCATA	CAGACTTTCC	TCAACATGTT	TACCAGAGAG	300
CAGTTAGCCG	AGAGCATCCT	CCACGAGGGC	AGCACAGGCT	GCCGGGTGGT	GGAGAAGTTT	360
CTGAAGATCC	TGCAGGTGGT	GGTCCAGGAG	CCAGGCCAGG	TGTTCAAGCC	CTTCTCCCC	420
AGCATCATCG	CCCTGTGCAT	GGAGCAAGTG	TATCCCATT	CGCTCGAG		468

(2) INFORMATION FOR SEQ ID NO:1245:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1245:

GAATTCGGCC	AAAGAGGCCT	AAGCTTATGG	GGAGGACACA	TATTTACTCA	AACATCCTGG	60
CAATTCATAT	CTAGGGCACT	CCCTCTGTGT	GTCAGACGCC	CTTGCAATGTG	TCAAATGTCA	120
TCTGATAACA	TTGATGAAAA	ATATCATTCA	CTTCTTCTTG	GTGCAGAAGG	CATAGACCGG	180
ATTATGCAAT	CACTGAGAAG	TAGCTTCTGG	ATGTGTTTTT	TGGTGGCGTC	TTAACAATTT	240
CAGCCGACTG	AAGGCTCTTG	GACACTTGGA	ACATTTGTAG	GGTTTCTCTC	CGGAGTGGAT	300
GCGCTGGTGC	TCCTTCAGGC	TCCCCCTGTA	GGTGAAGAACT	TTCTTGCACT	CTTTACATTC	360
GAAGGGCTTC	TCCCCCTGTG	TGGCTTCTCT	TGTGACACTT	CAAGTAGGAC	TTCTGGGTGA	420
ACTGCTTAGG	CCTCTTTGGC	CGAG				444

(2) INFORMATION FOR SEQ ID NO:1246:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 431 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1246:

```
GAATTCGGCC AAAGAGGCCT AGTATTTTGT ACTAGTTTTT TAATAATTAT AAGTCTTACA      60
CGTTCTCTAA TTCTTCTTGA ATCTGTTTAA TTTTCTCC TTGGGAATTG TTAAGTGTAC      120
ATGTATTGTG ATAACGTCTA TAATTTTGCT TTTATTGATT TTTTGTGCTT TATATCTGCT      180
ACAATTTGGT TCCTCCAAAT CCCATGTTGA AATCTGATCC CCAGTGTTCG TGGGGGATCT      240
AATAGCAGGT GTTTGGGTCA TGGGAACAGG TCCCTCATGA ATGAATTAAT GCCCTCACTG      300
GGAGGAGGGG ATAAGTAAGC TCTCACTCAT TTAGTTCCCA AGACAGCTGG TTGTTTAAAA      360
GAGCCTAGTG CCACTTCTCT CTTGCTTCCT TTCTTGCCGT GTGATCTCTG CACATGCCAG      420
CTCCCCTCGA G                                     431
```

(2) INFORMATION FOR SEQ ID NO:1247:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 389 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1247:

```
GAATTCGGCC AAAGAGGCCT ATTTTTTTTT TTTTTTTTTT TTTTTTTTTT TCNGGGTGTA      60
GAACATTTAT TTATTTTTC CACAAATCAC TGAAAGTTTA GGTCAAGTGG AAATAATTTT      120
AATCAAATAA TTGTACATAT TCTTCCCACA TATCCTGCCT TGTATTAGGA AATGACATTG      180
TGATCCATTT CATTACAAGT AAAATATTAC AAAATATTTA CAGGAAAATA TAAAAAATAA      240
CTCAAACACA AAAGGCAAGA TGAATAAAC TGTTTTTTTT TCTCCAGAAA TCTCTACTCC      300
AGTGCCCA CAACACAAGA GTCAAACAA ATAAGCAACT AAGATCCCCC GATCACAAT      360
TTCCAAAGAA CTAGGCCTCT TTGGCCGAA                                     389
```

(2) INFORMATION FOR SEQ ID NO:1248:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 380 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1248:

```
GAATTCGGCC AAAGAGGCCT AAAGGAAGGC CACTTCTCAA CTGGCAGAAC TTCTGAAGTT      60
TAGAATTGGA ATTACTTCCT TACTAGTGTG TTTTGGCTTA AATTTTGTCT TTTGAAGTTG      120
AATGCTTAAT CCCGGGAAAG AGGAACAGGA GTGCCAGACT CCTGGTCTTT CCAGTTTAGA      180
AAAGGCTCTG TGCCAAGGAG GGACCACAGG AGCTGGGACC TGCCTGCCCC TGTCTTTTCC      240
CCTTGGTTTT GTGTTACAAG AGTTGTTGGA GACAGTTTCA GATGATTATT TAATTTGTAA      300
ATATTGTACA AATTTTAATA GCTTAAATTG TATATACAGC CAAATAAAAA CTGCAATTA      360
CTTAGGCCTC TTTGGCCGAA                                     380
```

(2) INFORMATION FOR SEQ ID NO:1249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1249:

```

GAATTCGGCC AAAGAGGCCT GTTGGTTTG TGAAGTACT TAAAAATACT AAAATAAGCC      60
AAATAGATGC TAACAATACT AATTTGCACA CAAGATTGTA AAAAAGTACT TCAAGTTTAA      120
TCTCTTATCC CTAGAGAAAAG TAAATAAAAA GTGGCTCTTG CAAAAATAAA TGAAAACAAA      180
ACCACCAACA AAAACTAATC ATATAAGATA CTGTTTTTCT TTTGAATAC TTCAATTGGT      240
CCTATATTAG GATAAGGTTT TGATAGCAAG GACTTCCTAG CTTCTTCCTT TATCTTCCAT      300
TCTCTAGTCA CTTCCGTGTT TTTATCAAAC AAGGCTACGT GTAGGCTTTC CTACAAAGTC      360
AGATTGAATT CTACCACCCT CTCGAG                                     386

```

(2) INFORMATION FOR SEQ ID NO:1250:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1250:

```

GAATTCGGCC AAAGAGGCCT AACCATGTCT GACCAGATCA TTGGGAGAAT TGATGATATG      60
AGTAGTCGCA TTGATGATCT GGAAAAGAAT ATCGCGGACC TCATGACACA GGCTGGGGTG      120
GAAGAAGTGG AAAGTGAAAA CAAGATACCT GCCACGCAAA AGAGTTGAAG GTTGCTAATA      180
ATTTACTATG GAATCTGGCA TTTTCCAAG CCAAGAGAAG ATCGAATGGC TTTTGCAGC      240
TAACTACTAT GTGTAGACAG GTTTTATATT ATAAAGTATG CATTCTTATC ACCTAGTATA      300
TAGTTAGTTT GTAGAGTGAT TTCCCCCAG TTTCTTGAAC ATGGTATCTT CACATCTTGG      360
ACCTTGCTCA GTTGTGCTAT TCATTATTAA AACTAAAAAC TTGGCGGTT TAGGCCTCTT      420
TGGCCGAA                                     428

```

(2) INFORMATION FOR SEQ ID NO:1251:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1251:

```

GAATTCGGCC AAAGAGGCCT AAGAAAAGTA GTATGAATGA GTTTTCTAC ATATTAACATA      60
CAATTTATGG TAATTGTGA AATGTTTTTC CATTTTTAAA TGTAAGAGTC TCTATCTCCA      120
CTCACAAAGC AACAGGCACT GCTAGGGGTC TTAGGCTAAC ATCTGCCACC CCACCACTCT      180
GCATGGCCCA TAAACAGGTG CAGAGGACCA GAGTTCACCT GTCAGCAGCA CCGCAGAACT      240
CAACTCTAGG CCTCTTTGGC CGAA                                     264

```

(2) INFORMATION FOR SEQ ID NO:1252:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1252:

```

GAATTCGGCC AAAGAGGCCT ACTTTTTTTT TAATTTTCCA CTTTCTTCTT AACTTTACTT      60
CTCTTTTGTG CCCCCCCCAT CTTACAGAAG TTGAGGCCAA GGGAGAATGG TAGGCACAGA      120
AGAAACATGG CAAACTGCTC TGTGCTTTCA AACCAAAGTG TTCCCCCCTA CCCCCTAATT      180
GTCTAAGCAC TGGCCAGTCT GTTGTGGGCA TTGTTTTCTA CAACCAAATC TGGGTTTTTT      240
TCTTCTTTCT TTAACATAG AGGTACCACC ACAAGGGATG CCCTACTCTC TCGCAGCTCT      300
TGAAAGCATC TGTGTGAGGG AAAGGTCTCT GGGCAAGCAA GTGGTTATTT GGATTGCTTG      360
CTTCCCTTTT TCCACCTGGG ACATTGCAAT CATAAATAA CAGTAAATTC CAAACCTCTA      420
GGCCTCTTTG GCCGAA

```

(2) INFORMATION FOR SEQ ID NO:1253:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1253:

```

GAATTCGGCC AAAGAGGCCT AGGGTAGATC ACTTGATATC AGGAGTCGAG GCGGGAAGAT      60
CACTTGACGT CAGGAGTTCG AGACTGGCCC GGCCAACATG GTGAAACCGC ATCTCCACTA      120
AAAATACAAA AATTAGCCTG GTGTGGTGGT GGGCACCTGT AATCCCAGTG ACTTGGGAGG      180
CTAAGGCAGG AGAATTTCTT GAACCCAGGA GGCAGAGGTT GCAGTGACCA GCAAGGTTGC      240
GCCATTGCAC CCCAGCCTGG GCGATAAGAG TGAAAACCTC ATCTCAAAAA AAAAAAAAAA      300
AAATTCCTTT GGGAAGGCCT TCTACATAAA AATCTTCAAC ATGAGACTGG AAAAAAGGGT      360
ATGGGATCAT CACCGGACCT TTGGCTTTTA CAGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1254:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1254:

```

GAATTCGGCC AAAGAGGCCT ACCCGGTACT TACTTCTCAA TCCTAAAGAG AGAAAACAGG      60
TGTTTGATCA GTATGTAAAG ACCAGGGCAG AGGAAGAAGC CAGGGAAAAG AAAAATAAAA      120
ATGCAAGCCA AGGAAGATT CAAAAAATG ATGGAAGAAG CAAATTTTAA TCCAAGAGCA      180
ACTTTTAGTG AATTTGCAGC CAAGCATGCT AAAGATTCAA GATTCAAAGC AATTGAAAAG      240
ATGAAAGACC GAGAAGCCTT GTTTAATGAG TTTGTGGCCG CTGCTAGGAA GAAAGAGAAA      300
GAAGATTCGA AGACCAGAGG TGAGAAGGTA AGATGGTTTT AGTTCCAGTG GTGTGATTGA      360
TGGGAGTGTG AATGGGAAAG GTCTATGCTG GTGTTATGTT TCTAACCTTA TTCATTGGCA      420
TAAATAATAG GACGTACACT CGAG

```

(2) INFORMATION FOR SEQ ID NO:1255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1255:

```

GAATTCGGCC TTCATGGCCT AAGAAGGACT ACCCTGCACT GCTTTCCTTG GATGAGAATG      60
AACTCGAAGA GCAGTTTGTG AAAGGACACG GTCCAGGGGG CCAGGCAACC AACAAAACCA      120
GCAACTGCGT GGTGNTGAAG CACATCCCCT CAGGCATCGT TGTAAGTGC CATCAGACAA      180
GATCAGTTGA TCAGAACAGA AAGCTAGCTC GGAAAATCCT ACAAGAGAAA GTAGATGTTT      240
TCTACAATGG TGAAAACAGT CCTGTTCACA AAGACAAACT CGAG                          284

```

(2) INFORMATION FOR SEQ ID NO:1256:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 691 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1256:

```

GAATTCGGCC TTCATGGCCT AGTGGGAGTT TGCTAATGTG AAACCTAATG ATGTCTGAAA      60
ATGGTCTCGA TGGGTATTAA TAGCCATCTG GAAAAATTTT ACATCTTCAC AAATAATCCC      120
AATAATTTAT ATTGTGAAGA TATTATCCTG ATAGTCCTTC TTTTCCTATA TTCTTGTCGG      180
CTGTAGGATG AGAGCAGTAT GAAGCAAACA GAAGACATTT TGAAATTAAT CACAAAATTC      240
CCATTGCTTT GAAGCCTGCT ATTATTATAC TAAGCCTTCT TATAGCTTTA AAAATCAAAC      300
AATGCCAAAC AGTATATCTA ACATTTTAA TTTCTTTGA GCCAAACCA TTTGGTTTAA      360
ATTTCTCTGC CTCCGTGAAG ACAAGCTGGG CTGGGGAGGA CGGTGTCTAG GAGGGATGAC      420
CCCCTCAGC TCCAGGCAGT GTTCTGCCGA GACCCCAAGA ACTCGGGGTG TCAGAGGGCA      480
AAGGAACTAC CTGCCTTTCA CGGCTGCTGA CTTCTCAGGG CTGCAAGCAG CACAGAATGT      540
TATCCTTACG TCCTGAGCCG GTTTAAGTCT GTGGAAGAGG AAGCACGGGA GAAATCCACG      600
TAACCTTTC TTTCTTTTAA AGGGAAGCGG TTCCGCCGTG AACTTGGAAC CCTCAGCTCC      660
GGGTGTTCTC GGCAGAAGGG CAGCTCTCGA G                                691

```

(2) INFORMATION FOR SEQ ID NO:1257:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1257:

```

GAATTCGGCC TTCATGGCCT AAGCTGATCC ACGATCAGAG TGCTCCAGC TGCCCCAGCA      60
GCTCCCGTC CCCAGGGGAG GAGCCTGAGG GGAAGGGGA GACAGATCCG GAGAAGGTGC      120
ATCTCACCTG GACCAAGGAC AAGTCGGTGG CAGAGAAGAA TAAGGGCCCC AGTCCTGTCT      180
CCTCTGAGGG CATCAAGGAC TTCTTCAGCA TGAAGCCGGA GTGGGAGAAC TTGAACAGT      240

```

CCAACGTGCG GCGCATGCAC ACGGCCGTGC GGCTGAACGA GGTTCATCGTG AAGAAATCCC 300
 GGGACGCCAA GCTTGTTTTG CTCAACATGC CTGGGCCTCC CCGCAACCGC AATGGTGATG 360
 AAAACTACAT GGAGTTTCTC GAG 383

(2) INFORMATION FOR SEQ ID NO:1258:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1258:

GAATTCTGAG GGAATAACTA CGACCATGAG ATTGGCAGTG ATTTGCTTTT GCCTATTGTTG 60
 CATTGCCTCC TCCCTCCCGG TGAAAGTGAC TGATTCTGGC AGCTCAGAGG AGAAGAAGCT 120
 TTACAGCCTG CACCCAGATC CTATAGCCAC ATGGCTGGTG CCTGACCCAT CTCAGAAGCA 180
 GAATCTCCTT GCGCCACAGA ATGCTGTGTC CTCTGAAGAA AAGGATGACT TTAAGCAAGA 240
 AACTCTTCCA AGCAATTCCA ATGAAAGCCA TGACCACATG GACGACGATG ATGACGATGA 300
 TGATGACGAT GGAGACCATG CAGAGAACGA GGATTCTGTG GACTCGGATG AATCTGACGA 360
 ATCTCACCAT TCCGATGAGT CTGATGAGAC CTTCACTGCT AGTACACAAG CAGTCGAG 418

(2) INFORMATION FOR SEQ ID NO:1259:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 189 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1259:

AAAAATTAAA TAATGCTTGA CTTTTTTTTT TTTTTTCTC TTTTGAGGC AGGTTCTTGC 60
 TCTGTCACCC AGGCTGGACT GCAACAGCAT GATCTTGGCT CACCTCCGCC TCCAGGGCTC 120
 TGGCAATCCT CCCACCTCAG CTTTCAGAGT GGCAGAGACT ACAGGCTCAT ACCACCGCAC 180
 CCACTCGAG 189

(2) INFORMATION FOR SEQ ID NO:1260:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1260:

GCGATTGAAT TCTAGCCTTT CCTCCGTTCA AGTAAATTTA GAAATTTCTT AAGTTTTCTT 60
 TATAACAGGT AGCCTAAATC TATATCATAC TTTTAAATA AAAATCTAGG TGCAAATTTG 120
 TTCTTATGGT TAAGGTTAAC ATGTACACTT CACAAACATT GAGACTTTTG TTTTGTTTTC 180
 TGGGACAAGG TCTTGTTCTG TCTCCAGCT GGAGTGGATA CAAGCATGGC TTGCTTCAGC 240
 CTCAACCTCC CGGACTCAAG CGATCCCCC CCCTCGAG 278

(2) INFORMATION FOR SEQ ID NO:1261:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1261:

```

GAATTCGGCC TTCATGGCCT ACTCACTGGA TGCTGGGGGA GGGCCCCTCA GGTGAGCAGC      60
CCACCACTGA CTTCAGCGTT GCTGGCTCGG TTATCAGACT CTCATCCAAC ACAAGCTCAC      120
AGGGAAAGCC GTTCCTTGCT CCTTGTGGAG GGAGCTACCG TCATTGCCCT GAGACCACCA      180
GCCAAGAAAG TAGGTATGTC CAGGTAGGGA ATTCAGAGGG ACCCAGTGCA TCCAATTATA      240
CAATTATACC CAGAAAGTCC TCGAG                                           265

```

(2) INFORMATION FOR SEQ ID NO:1262:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1262:

```

GGTCAGTATT GAAGGTTGTT TTCTGAGCCA TTGTATGAAG CTGCTGTTTT GGCCTCCCTA      60
ATGCAGGGTG AGATGGTAGT GTGATTCTTG TTGTGACATC TCGTGACTGG GCAGGACGCT      120
GAATACTGAT TGCTGCAGAT GGAGGATGCT GGATAGACAA GGTGGCCCTA CTAAGTGCTG      180
AATCAGTAGC ATGCGCCGCT GTCGTAGTGA TGA CTGAGCTCTG GTGGCTGAGA      240
CAGTTGCTAC CACAGCAGGA GGGATGGCAT TGGAGGTGGT CACAGGTGGC CGAGACTGGA      300
TTGGTTGGTG AATGATGTGC TGTACTGCTG GCTGAGCAGT AGCAGCATTT GGCAGCTGTG      360
AGGTCGGCCT CAGGACTGTG GTTACTTTAG AACTGGACAT CACAGCAGCA GCAGCTGCAC      420
CTCGAG                                           426

```

(2) INFORMATION FOR SEQ ID NO:1263:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1263:

```

GAATTCGGCC TTCATGGCCT AGGCCGGTGT TTATGCACGA TGGCGTTGAA AGCTAGTCCA      60
TCTCTCCAGC TGGTGGTGAA GTTGTGTACA TTGACGTTGG GATAACCTGC AGTCTTCATC      120
TGGCACCACA GAAGCAGGGC ATCCTTGGCT GACTTCTTCT CCTTGTGTC TTCTGTCTCC      180
ACACTGATGT CTTGGATCTG GAATCGAAGG ATGATGGTCC AGACCAGCCC AAGGGTCAGT      240
CGGTGGTTTC CGTCCACAAT GTCATGGGAG CCCATGTTTT CCAAGTGAC TTTCTGCTCC      300
TTGAGGAAGT GCAGTGCCTT GTCCACGTT TCCAGGCACT GGATCCGCAT GCGGCCCTTT      360
GTAGGCTTTG GCAGTATCTC TCCGAGAGC ACCTCGAG                                           398

```

(2) INFORMATION FOR SEQ ID NO:1264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1264:

```

GAATTCGGCC TTCATGGCCT AAAAAAGCT GTTAAGAAAA TATGTTTAA AAATTGCCC      60
AACAGGAAGG AGAAAATTAG AATCTAATAG CAAACTTGTG TCAAAGCAGG GGAGACCACA      120
TGATCTTCCT CTTTGAAAT CTGTCCTGGG TGATGACCAT ATGCTCTCTA AACAGGTTT      180
CTGTGTTTGA GGGAAAGAAG CTCAGAAAGG ACCCTGCTC TTGATGACC TCCCTCCGGC      240
CAGCAGTAAC CTCGAG                                     256

```

(2) INFORMATION FOR SEQ ID NO:1265:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1265:

```

GAATTCGGCC TTCATGGCCT ACAGAGTCTA ATTAGCCATA TTTATATGAT AATAATAAAC      60
ATTTTGCTA CAGTCCTACC TAGATTTTTT TTTTATAGAT GGAGTCTTGC TCTGTCGCCC      120
AGGCTAGAGT GCAGTGGTGC GATCTTGGCT CACTGCAACT TCTGCCTCCC AGGTCAAGC      180
AACTCTGTTG CCTCAGCCTC CCAAGTAGCT GGGATTACAA GCGCACATGA CCACGCCTGG      240
CAGCTCGAG                                     249

```

(2) INFORMATION FOR SEQ ID NO:1266:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1266:

```

GAATTCGGCC TTCATGGCCT AGGTTATATA GCAGTGATGC TTTCATAGTA TTTTCTTGA      60
ATAAGGTCCC CAAAACCTTA TTAAGTTCCT GGTAGGCATG GAGCATTGAA GATGGCAGAC      120
ATGGTGCACT CTCTCAAGGA GTTACGCTC TAGTGGAGAA AACATCAGA CAGCCTTAA      180
ATACATGTAT GGCTACTATA ATAAATACTG TGAAGCAGGA GTGCACCACG AAACCTGGAG      240
TCCTCTCCAT CCTCCCCTTC TCGAG                                     265

```

(2) INFORMATION FOR SEQ ID NO:1267:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1267:

GAATTCGGCC TTCATGGCCT ACTAGACCTG CCTCGAGATT AGGGGGGTTA GACTCAGAAT	60
TCTGTCCAAA CTCCTGGACG ACCTCTTGAA ATTAAGTCAG GGATTTTATG TACTGGGTTA	120
ATTTGTAAC CTCTGGGTAT AATATTAGGT TTGCATGTAG AAAGGGTCTC CAGTATAGGA	180
CTTCAAAGAA ACTAAGCCAT AGACGTAATT TAAGGGCTGT TCTGATCTGA AGAAGTGCCA	240
TGGGTAGAAG TTTTAGCCAT GGTAAAGAGG CTTCCTGGCA TCATTGCTC GAG	293

(2) INFORMATION FOR SEQ ID NO:1268:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 501 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1268:

GAATTCGGCC TCATGGCCTA CTGGTCCAAG CTGATTACCC TCATAGTGTC CATCATTGAG	60
GAAGACAAGA ATTCCTACAC TCCCTGCCTC AACCAAGTTT CCCAGGAGCT GAATGTGGGT	120
AAAATCAGCG CTGAAGTGAT GTGGAATCTG TTTGCCCAAG ACATGAAGTA CGCCATGGAG	180
GAGCACGACA AGCATCGTCT ATGCAAGAGT GCCGACTACA TGAACCTCCA CTTCAAGGTG	240
AAATGGCTCT ACAATGAGTA TGTGACGGAA CTCCCCGCT TCAAGGACCG CGTGCCTGAG	300
TACCCTGCAT GGTTTGAACC CTTTCGTCAT CAGTGGCTGG ATGAGAATGA GGAGGTGTCC	360
CGGGATTTCC TGCACGGTGC CCTGGAGCGA GACAAGAAGG ATGGGTTCCA GCAGACCTCA	420
GAGCATGCCC TATTCTCTG CTCCGTGGTG GATGTCTTCT CCCAACTCAA CCAGAGCTTT	480
GAAATCATCA AGAAACTCGA G	501

(2) INFORMATION FOR SEQ ID NO:1269:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1269:

GAATTCGGCC TTCATGGCCT AGGCCCTGC TCCACCTGGG GGGACTGGGA GTGTGAGTGT	60
GCATGGCATG TGTGTGGCAC AGATGGCTGG GACGGGTGAC AGTGTGAGTG CATGTGTGCA	120
TGCATGTGTG TATGTGTGTG TGTGTGTGGC ATGCCGTGAC AAATGTGTCC TTGATCCACA	180
CTGCTCCTGG CAGAGTGAGT AACCCAAAGG CCCCTTCGGC CTCCTGTAG CTGTTTCTT	240
TCCTTTTGTG GTTGGTTTTA AAATACATTC ACACACAAAT ACAAATTGAC AGGTCAAAT	300
CCATGAAATG AGATCCCCCA GCGGCTCGAG	330

(2) INFORMATION FOR SEQ ID NO:1270:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 502 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1270:

```
GAATTCGGCC TTCATGGCCT AAAAAAAAAA TACTGATTCA CTTTGGCAAT TTTTCAGATA      60
CTACTTGATG TGACACCTCC CCTAGGCTTG CTGTGGGTCT CTTGGAAGAT AGAGCTATAT      120
TAACTCCTTG ACTTAAAGGG CAGCAGACTA TATAAGGTCT CTTTACAGAC AGAGTAGGGA      180
GAATAATGAA AAACTTTTGG ATTTCTAGAG AGAAGAGAGA AGACATAGCA ATGGAAGTGT      240
TCTTAGCTTT GTTTGCTACA ACTCTTCAA GTTTAATTTT AGATTCAGTG CATTATTCA      300
TAGAGCATGA AACATATAAT CATGCCCTTT ACTAATTGCG GATACTTAA ATTATATATT      360
TTTGACCTAC TGTGTTATGG TCAATTTGAA AAAGAATGGT TTGATTATAT ATTATTGTCT      420
GTAGATTCCC TGTACTATTG TAGGATCATA TGACATATTA TCATTACTAA ATATAGCACT      480
AATTATTGAT GCTCCGCTCG AG                                         502
```

(2) INFORMATION FOR SEQ ID NO:1271:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 285 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1271:

```
GAATTCGGCC TTCATGGCCT ACCCCTGACT ATTCAGTAGG AGAAGAAATC AAAAATCCAT      60
TCCTTTCTCC TTCTCTCCCT CCAACAGTGG CCAGGGGAAG GGAAGTGAG GGCAGGGGCA      120
AAAAGATTGG GGAATTTTGA TTTATTTATT TATTGTGACT TTTCATTTT TTGGTATTGG      180
GCTTTACTGG AATAGGAGGG CCCCTGCCCA CTGTGCCCCG TTTATCCCTT ATCCCCCAA      240
CCCTGCTCTC CCCAACACCT ACTCACTTAA GCACCTGTCC TCGAG                                         285
```

(2) INFORMATION FOR SEQ ID NO:1272:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 405 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1272:

```
GAATTCTAGA CTGCTCCCA ATTTGAAGAT TTATTCTCT CTTGGATAT AGAACAAAAT      60
AACTTTATGT ACATTTTATT TCACTTTATT TTAATTATTG GTTGGTGCAA AACAAATTGC      120
AGTTTTCCCA TGAAAAGTAA TGGCAAAAAC TGCAATTACT TTCGCACCAG CCCAATATTT      180
TATTTTGAGA CAGAGTCGCA CTCTGTCACC AAGGCTGGAG TGCAGTGGTG TCATCCCAAC      240
TCACTACAGC CTCTGCCTCC TGGGTTGGAG AGATTCTTGT GCGTCAGCTT CATGTGTAAC      300
TGGAATTACA GGTGCACGCC ACCACGCCCA GCTAATTTT GTATTTTGTG TAGAGATGGG      360
GTTTCGCCAT GTTGCCCTGG CTGTTCTCAA ACTCCTGACC TCGAG                                         405
```

(2) INFORMATION FOR SEQ ID NO:1273:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 412 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1273:

```

GCGATTGAAT TCTAGACCTG GCTCGAGGCA GGTCTAGAAT TCAATCGGCT TCCTGGCAGT      60
GCCCTCTCCC AGATGAGACC TGATCTCTTT TTTGTTTTTT GTTTTTTGTT TTGAGACAGA      120
GTTTTGCTCT TCTTGCCAG GCTGCAGTGA GTTGAGATCG CACCACTGCA CTCCAGCCTG      180
GGTGACAGAG TGAGACCCCA TCTCAAAAAA AAAAAAAAAA ATCTGGCCTT ATGGACTGTG      240
TACTACACTC TAGTGGGGGT AAGAGGCAAT GGGTAAATAG GTAAGTAGAT TATTGGATGT      300
ATTAGAAGGG GCATGGGGAA TGTGGGGTCA AGGTTATAGT TTAAATAGG GTGGTCAGGG      360
AAAGCTTTCT GAGAAGGTGA CATTTGAAAC AAATACTTGA AGGAGTCTCG AG              412

```

(2) INFORMATION FOR SEQ ID NO:1274:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 285 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1274:

```

GAATTCGGCC TTCATGGCCT AGCTATTTTT AAACAATATC TGAGATTATT CATTCAACTA      60
AAACTTATTA AGCATTTAAT ATCTGTCTGG CATTCTTCAG GCACCAAGGA TATTTCGTTG      120
AACAAAACAA AATCTTTGTC ACTATGGAGT TTACGTTTGG TGGTGGCATT GGAGTGAAGA      180
GCTAGGGAAT AAAAAACAA GTCAATATGT AGTATGCCAC TTGGTGGTAA GTCATTGGA      240
GAATGATGTA GTAGGGAAG AGGAAAAGGG TGTAGGCATC TCGAG              285

```

(2) INFORMATION FOR SEQ ID NO:1275:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 280 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1275:

```

GAATTCGGCC TTCATGGCCT ACTCCACACA TTCATCTCCC AAAGGACTCC TTGAATATTT      60
GCCCCAAAAC ATCAGCTCCC AGAAAACACC CCTCCCAGTC ACACACACAC CCAAATTCTC      120
CGATGTATTT TCATTTTTTT TCTCCTCTTC TCTTCTCTTT TTCCTTCCTT CCTTCTCTCT      180
TTTCTCTCTT TCCATCCCTC CCTTCCTTCC TCCTCCCTT CCTTCCTCCC TCCCTTCTCT      240
CCTCCCTCCC TCCTTCTCTT CCTCCCCCA CCACTCGAG              280

```

(2) INFORMATION FOR SEQ ID NO:1276:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 220 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1276:

```

GAATTCGGCC TTCATGGCCT ACGAGTGGTG CGATTTTTTT TTCTTAGCTT ATCAGCTATG      60
GTTAGTGTTA GCGTATTTTA TGTGCGGCCC AAGACAATTC TTCCTCTTCC AGTGTGGCCC      120
AGGAAAGCCA AAAGATTGGA CACCCCTGGT AGAGGCAGAA ACTCACTGGG TTAGTTCCAC      180
AGCATCTGAT CAAAGATATG AGGCCAAAGA GCCTCTCGAG                                220

```

(2) INFORMATION FOR SEQ ID NO:1277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1277:

```

GAATTCGGCC TTCATGGCCT ACGAGCTGAG ATTGCGCCAC TGCACTCCAG CCTAGGCAAT      60
AGAGTAAGAC TCCATTTCOA AAAAAAAAAA AAATGTTGAT CAAAAGAAGC CAGATGACAG      120
AGTACTCACT GTGTGAGTCC ATTTATTGTA AATTCTAGAA CAAAAATAA ATATCCATTG      180
ATAGAAATGG GAACAGTGTT GGCCTATGAA GAATGGAAAT TGACTGGAAG GAGGCCTCTG      240
CTCGAG                                246

```

(2) INFORMATION FOR SEQ ID NO:1278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1278:

```

GAATTCGGCC TTCATGGCCT AGCTGGGCGT GATGGCGGGC GCCTGTAGTC CCAGCCACTC      60
GGGAGGCTGA GGCAGGAGAA TGGCGTGAAC CCGGGAGGCG GAGCTTGCAG TGAGCCAAGA      120
TTGCGCCACT GCACTCCCGC CTGGGCCACA GAGAGAGACT CCATCTCNAA AAAAAAAAAA      180
GAAAGAAAAA AAGAAAAATA ACAGAGAAAA AATTAAGATT TTTGAAATAA AAACAAATAT      240
TAAAAATTAT TGAAATATAT TGAAAGTTTT TTCACCATAT ATATTTACCT TTTAAAGGA      300
TATGAATTCA ATTATTTTAT TTGCTTATGG AAAATAGATC CACTGCTCTA AGATGCTACT      360
AATCATGCTC AGAGGATTCA CAACAAACAG ACTGATAAGG TATTACTTAA AGCGCTCTAC      420
ATTAAATAGA GCATTCCAGT TTTCTAGGGC ACACTACTTG CTGTATTTC AAGGTCAAGC      480
AAAATAGCTT TCGTTCGAG                                499

```

(2) INFORMATION FOR SEQ ID NO:1279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1279:

```

GAATTCGGCC TTCATGGCCT AATGAGCTAA AAGCAGTGTC ATCTCCGCAT GTTGGAGCAG      60
CCAAGAAATA GTTTGGTACT ACCGACATTG TCTAATCCAT GTCACATCCT CATACAATTT      120
AATTGCTCAA CCATGCATTT AAAACTCCTC AAGAAAGGAT TGGTACTGCA ACTGTAGGTA      180
AACTGAAAAA AAATAAGAAA GAAAGAGTTG GATGAAAATG TGAAAGCCCA AGTTTAGATG      240
TGCATTAAGT ATTAAATAGC ACAGTATCTT CTTATGGAG CTTTTTTTCC TCCCCATCC      300
CCTGCAGCTA CCTCGAG                                     317

```

(2) INFORMATION FOR SEQ ID NO:1280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1280:

```

GAATTCGGCC TTCATGGCCT ACTTCCTTTC ATTTTGAAGC AACAGTTTAT AAACAGGAAA      60
GTCTACTGGT TTCATAGAAT CTGTCAGATT TGCTTATTG CTACTGGTTT CACGCGCGTG      120
GACTATATTC CAGTGTCTT AGTCAAAGAC CTTTATCCTC AAATCATGAG ATTAGAGTAA      180
AACAACTGCT GTAAGGTTGA GCATTTCATG ACCAATGACT ATGAAGGCAC ATTCACCAAA      240
CACAGGCACT TTAAGGGCAT CCTTGATTAA TTTGCTAATT GCTATTTTT GTTGGTATGT      300
GAATTCCTGC TAGGAGGCCG AGGCTAGTAG GCAATGAAAA AGACAGAACA ATGGTAAAT      360
GCAGCCCCGG TCCTCTACAA ATTGACAGTA TAATTTAGGG GCTCGAG                                     407

```

(2) INFORMATION FOR SEQ ID NO:1281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1281:

```

GAATTCGGCC TTCATGGCCT AAGATTGACA AAGAAATAGA GCTTCACAGA ATTCTTCATC      60
ATAAGCATGT AGTGCAGTTT TACCACTACT TCGAGGACAA AGAAACATT TACATTCTCT      120
TGGAATACTG CAGTAGAAGG TCAATGGCTC ATATTTTGAA AGCAAGAAAG GTGTTGACAG      180
AGCCAGAAGT TCGATACTAC CTCAGGCAGA TTGTGTCTGG ACTGAAATAC CTTCATGAAC      240
AAGAAATCTT GCACAGAGAT CTCAAAC TAG GGAACCTCGA G                                     281

```

(2) INFORMATION FOR SEQ ID NO:1282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1282:

```

GAATTCGGCC TTCATGGCCT AGTAGTTAT TATATAGAAA TTATTGTGCC TTGTCTTAGT    60
TGTGCCCTTT GACTCAGCAA TTCCCCTTCT ATAAAAATTT CCCAAGCAGA TGATTATGGA    120
TATATGCACC AATTTGGAAA CAGGGATGTT TATTGTTTAT AGTAGCACTC AACTGAAAAC    180
AACATAGTTG TCTTCAGGAG CGGGGACTGA TTAAATTATG ACATGAAGCA GAATAATGCA    240
AAATCTCGAG                                         250

```

(2) INFORMATION FOR SEQ ID NO:1283:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1283:

```

GAATTCGGCC TTCATGGCCT AGCTGAAGAA GGCCTTCACA GAGCTTCAAG CCAAAGTTAT    60
TGACACTCAA CAGAAGGTGA AGCTCGCAGA CATACAGATT GAACAGCTAA ACAGAACGAA    120
AAAGCATGCA CATCTTACAG ATACAGAGAT CATGACTTTG GTAGATGAGA CTAACATGTA    180
TGAAGGTGTA GGAAGAATGT TTATTCTTCA GTCCAAGGAA GCAATTCACA GTCAGCTGTT    240
AGAGAAGCAG TCTCGAG                                         257

```

(2) INFORMATION FOR SEQ ID NO:1284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1284:

```

GAATTCGGCC TTCATGGCCT AAAGACTAGC ATATTTATCT TTGACTTGAT TAATCAGACC    60
TAATTTGCAT TCGCAAATGA GACTGATAAA AATGGATTGA CCTTTTAACC TTTAGAGGAG    120
GAAAGGTATT TCTCTGCAAG ATTCTGCGG CTATCGTTTC TTAACCGATA AGAAGCCACT    180
CCTTTATCAA TAAAGATGAA AATCCGCAAT TTGCATTAGT GAATGGGACT GATTATTATA    240
TAGTTAATTA GCATCTGGAA ATGAGGATTA TCTTAATTAC AAAGCACAAT TTCCTAATA    300
GCTACAAAAC TGTAAGTTTG ATCCATGTGG AAATTGGTAA CATTATTATG TAATTAGTGA    360
TAACATTAAT AGTGTAGAAT ATTTAGATGT AATTGTCATA TGCAAATGTG ATTTACCTGA    420
GCCAAAACT CGAG                                         434

```

(2) INFORMATION FOR SEQ ID NO:1285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1285:

```

AGCAATATTT ATTTTAGACA GACTTCTGCG TTATGACCCG GCTGCTGGGC TACGTGGACC    60
CCCTGGATCC CAGCTTTGTG GCTGCCGTCA TCACCATCAC CTTCAATCCG CTCTACTGGA    120

```

```

ATGTGGTTGC ACGATGGGAA CACAAGACCC GCAAGCTGAG CAGGGCCTTC GGATCCCCCT 180
ACCTGGCCTG CTACTCTCTA AGCATCACCA TCCTGCTCCT GAACTTCCTG CGCTCGCACT 240
GCTTCACGCA GGCCATGCTG AGCCAGCCCA GGATGGAGAG CCTGGACACC CCCGCACTCG 300
AG 302

```

(2) INFORMATION FOR SEQ ID NO:1286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1286:

```

GAATTCGGCC TTCATGGCCT AATCTTTTCT AATTTGTCTT AATGCTTTAT AATTTTCTAT 60
GCAGAGGTCT TGTAGATCTC TTTCCAAGAT ATTTGATGTT TGTTTGTGTT TTTGTTTGT 120
TGTTTTTTGA GACGGAGTCT CACTCTGTTG CCCAGGCTGG AGTGCAGTGG CGTGATCTTG 180
GCTCACTGCA ACCTCCGCCT CCTGGGTTC AAGCAATTCTC CTGCCTCAGC CTCCAAGTC 240
TCGAG 245

```

(2) INFORMATION FOR SEQ ID NO:1287:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1287:

```

GAATTCGGCC TTCATGGCCT AATTTTTTTT CTCCTCTTTC TTCTAGTACA TATTGATAGG 60
TATAACATAA TTAAGGTTTA AAAAAAATTA GACATAGTTA TTCAGATTGA GGACCAGTAA 120
GGATAGAACT TTCTCTTATT TATGAAAAAA AATGCTAATA ATTTTGGGGC AGTTTTTTCC 180
TTTAATTATT TTTTCAATT TCAAGTTTAA TTTATTTTA GCTGATCTCG AG 232

```

(2) INFORMATION FOR SEQ ID NO:1288:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1288:

```

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGCCT TCATGGCCTA AGAAGATCAC 60
TTGAATCTGA GAGGTAGAGG CTGCAGTGAG CGAAGATCAC ACCACTGGAC TCCAGCCTGG 120
GCAACAGAGT GAGACCTGT CTCAAAAACA AAGAAGAGCA CTAGCTTCTC TATCAAGTAA 180
GTGTAGGGTT TAAAAAACA CAAATGGACT TTGGTAGACC AAAACAAAAG CCCACGAGTA 240
TGGAAGTTTC CCTGAAGTT GGAAATTCAA TTTCCCCTT ACCCCCCCAA CCCTCGAG 298

```

(2) INFORMATION FOR SEQ ID NO:1289:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 227 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1289:

```
GCGATTGAAT TCTAGACCTG CCTCGAGCCA TACCCATGGT CAGCCTCTTC CTCGTGTTCA    60
CGGCCTTCGT CATCAGCAAC ATCGGCCACA TCCGCCCGCA GAGGACCATT CTGGCTTTTG    120
TCTCTGGCAT CTTCTTCATA CTATCGGGCC TCTCCTTGGT GGTGGGCTTG GTTCTTTACA    180
TCTCCAGCAT CAACGACGAG GTCATGAACA GGCCCAAACA GCTCGAG                    227
```

(2) INFORMATION FOR SEQ ID NO:1290:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1290:

```
GAATTCGGCC TTCATGGCCT AGACAACTCT TAGCTAAATG TGGTTGGTT TTGAGCTGGA    60
AGAGAGTACA AGGTGCTTCC GGAAAGCTTC AAGCCTTCGG ATTCTGTGAG TACAAGGAGC    120
CAGAACTTAC CCTCCGTGCA CTCAGATTAT TACATGACCT GCAAATTGGA GAGAAAAAGC    180
TACTCGTTAA AGTTGATGCA AAGACAAAGG CACAGCTGGA TGAATGGAAA GCAAAGAAGA    240
AAGCTTCTAA TGGGAATACT CGAG                    264
```

(2) INFORMATION FOR SEQ ID NO:1291:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 323 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1291:

```
GAATTCGGCC TTCATGGCCT AGGTGCTCTC AAGGATCAGT ACTGGGTAAC AATAATCAAA    60
CTTTGAATTT AAACATGCAT CTATTATTTG TGTTTTTTGT TTTTGTTTT GAGGCAAAGT    120
CTCACTCTGT CACCCAGGCT GGAGTGAAGC AGCCCAATCT TGGCTTACTG CAACCTCCAC    180
CCCCTGGGTT CAAGCAATTC TCCTGCCTCA GTCTACCTAG TGGCTGGGAT TACAGGCGCC    240
CGCCACCACG CCCAGGTAAT TTTGTGTTT TAGTAGAGAT GGGGTTTCAC CATGTTGGCC    300
AGGCTGGTCT AGAATTCAAT CGG                    323
```

(2) INFORMATION FOR SEQ ID NO:1292:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 289 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1292:

GCTCGAGAAA	CTTCTGCTGC	ACGTGCGTCT	TCCCCTCCAC	CTTCACCCCT	TGTGGCTCAC	60
TCACGCACCC	ACTCTCCAGT	CCACCCCTCC	TCAGAGACCC	TGTCCACTCA	TCCATCTCTC	120
TCCCATTGCG	CTTCCTCTTC	ACTCCGTTCC	TTCTGCCTCC	CACCATATGC	AAATCTTCTC	180
CATCCTTAAA	AGCCTGATTG	CCTCCTCTGG	ATTTTTCAC	ACTCTTGGGG	AACCTCCTGT	240
GACTCCCTGC	CCTTCACCAC	CAGCCTTTCC	CAAAGAGAAA	TCCCTCTCA		289

(2) INFORMATION FOR SEQ ID NO:1293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1293:

GAATTCGGCC	TTCATGGCCT	AGTTGAAATC	TTTAGGAATG	AACTTCTGAG	GGCCAAAAAA	60
TGTGACTGAC	GGGAACAATT	CTTAAACTGA	TTAACTAGCT	GTAATATAGT	TTTGTGAATT	120
TATTGCACTG	ATGTTGTACC	TTGTGGTATA	TCTGTCCCTA	TAAATAAGT	GTTGTTTTCT	180
CCTCTTTAAT	ATTGCTGTGA	ACAGTGGTGC	CCATTGTAGC	ATATGTTTGA	TTTTTTTTTA	240
TTATTTTATA	AGAAAACTAC	GTTAATTTTA	CCTTACTTTC	ATTGTAAATA	AGCCTGTCTT	300
CCTATCTGGA	TTTTTTGTGT	GCATACATAT	TCTACTGATT	AACTACTTTT	GCAGTTTTAA	360
TCCTGTATTA	TTTCTTCTAC	TTTGTTTTGT	GTAAAAGGGG	AAAAAATAAA	AAAAGCTCGA	420
G						421

(2) INFORMATION FOR SEQ ID NO:1294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1294:

GAATTCGGCC	TTCATGGCCT	ACAGGTGTAT	GTCACCATGC	CTGGCTAATT	TTGTTTTTCT	60
TTTCTTTTTT	TTTTTTTCTT	AGAGACAGGG	TCTCACTATG	TTGTCTGTCC	TGGCTGGTCT	120
CAAACTCCTG	GGCTCCATCT	TCCGCTTCG	GCTTCCTGAA	GTGCTGGGAT	TACAATAGGC	180
ATGAGCCACT	ATGCCCATCC	TAAAGTTTTA	CAGCCCAATA	ATAGTAATAT	TCCATCACTA	240
CAGCTATCAT	TGAGTTTCAG	AAGTTAGACT	GTTAAAAGTT	TCAGTAAAGA	GCTTTAACCA	300
GTTTATTGTG	GCAATACTGT	GTACACAATT	ATTTTTTGTA	AAAGGAAGGA	GATTCTGTGC	360
TTAAATAGCT	TTAATAAAGT	TTCAAGTTTCA	TATACAGGAA	ACCTCGAG		408

(2) INFORMATION FOR SEQ ID NO:1295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1295:

```
GAATTCGGCC TTCATGGCCT ACAGGCACTC CAGTTATAAT TATGTGCCTT TCTTCCATTT    60
CTACCACTTT CTCTGATACT TCTCACTTCT TTCTCTGGTA CTTCTCACTT CTTTCTCTGG    120
TATCATTTTC ATTCTTCATC ATTGTTTTAG TGCCTTTACT TCAATTCCTT CATTATTGA    180
ATTTTCTTT TTATCATCTT GTGATTCAGT TTTTATTAT TTTTGATAG TATTCTCCTT    240
TTCTTCCATT CCACTCGAG                                         259
```

(2) INFORMATION FOR SEQ ID NO:1296:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1296:

```
GAATTCGGCC TTCATGGCCT AGTGGAGAGT GCTATCATTACACCTGAAC TCTGGGCCAG    60
CTTAAGTGTA TATTCTGTAA AAAATTTGAA ATCCCCCAA TGTCACATGC TATGACAGTC    120
ACTTTCTTTA GTACTTTGTA ATCATACAAA ATGGTGTATG GGCTAAATAT TGCAGCACCT    180
ATGTCGTCAT CCTCCATGTT GCTTATTGAT CATGGAATGT TAATTAGCA ATAATTTCCT    240
CTGTGTGTGC GCTCGAG                                         257
```

(2) INFORMATION FOR SEQ ID NO:1297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1297:

```
GAATTCGGCC TTCATGCAAG TAGGGTATGT AGGCTTCAGT TGGTTCTACT TTCAGAGAGT    60
TAAGATGGAA TGAGGCAGCT CATGGCACTA CAGGTCAGTT GCCTTCTCTC CAAAATGTTT    120
ACTCATGCAT GTGGGCACTC ATTGTATTTG AATAACAGCA ACAGTGCCTC CCTCAGTTTG    180
GAACCTCTAG TCCACTTGCT CACTCATGGT CCCTGCCTTA ACCCCAGTCA AGTTCAAAGC    240
CATAGGCATC ATTTGTCCGA CTGACATATT AGGGCATCTA CCAGTCAAAG GGTGATTGTT    300
GTAGATGACC TTTGGCCCGT TCTCGAG                                         327
```

(2) INFORMATION FOR SEQ ID NO:1298:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1298:

```

GAATTCGGCC TTCATGGCCT ACACCTCTCAT GTTGTGTGCA GCATTATTCA CAATAGCCAA      60
GGTATGGAGT CAACCTGAAT GTCGAACACA TGAATGGATA AAGAAAATGT TCACACACAC      120
AATGAAATGT GATTTAGCCT TTA AAAAGAA GGAAATCCTG CCATTTGGA CAACATGGAT      180
GAACCTGGAG GCATTGTGC TAAGTGAAAT AAACCAGACA CAGAAAGACA AACACTGCAT      240
GACCTCACTT ACTGTGGAAC CCCTCGAATT CTGGATCTCC CTCGAG      286

```

(2) INFORMATION FOR SEQ ID NO:1299:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1299:

```

GAATTCGGCC TTCATGGCCT AATGAATTTA GTATTATTTT TATCATTTC ATTGCAAATT      60
GTCAGTATCC CCGTCTACGT TTCTACTAAT TTACCATCGC TTCTTCAAAA AATTGTGTTT      120
AGAGTGCTAC AATTTAGAC TTTGAAATGA ATCACTATAA CTTTTAAAAA TTAGAGATT      180
TAAAAACTGG AGATTGAATA TATATAAAAA ATACAAAATT TGACATTAA AACCTCATTG      240
AACTTTTAAA AAAGCCAGAC TCATATTAAG GCACACACCC TCGAG      285

```

(2) INFORMATION FOR SEQ ID NO:1300:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1300:

```

GAATTCGGCC TTCATGGCCT AGGGCCAATG GCCAGGATCT CTGGGGACTA GAAGGGTGGA      60
TTCCTGAACC TGGGTAACAA CGAGACAAAC TCTAGCAATC TGAGCAAGGG AAGGGTCATC      120
AAAGTCCCAA AATCTAGCCC ACTAGCTGCC TAGCCAGGTA AACCAAGGCT TAGGGAGTTT      180
AGACCCTTTC ACATAAGAA GCTTAATAAA AAGTGTGGG TGAAGAGATA AACACATGAA      240
GGGGTTGGCT AAAGTCAAAA GAAGATCCGA GGCAGGTCTA GAATTCAATC GG      292

```

(2) INFORMATION FOR SEQ ID NO:1301:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1301:

```

GAATTCGGCC TTCATGGCCT ACTCCTCATT TGCCACCACC AGGCCAGTTT GTCCCTTTCC      60
AAACACAGCA ATCAGGATCG CCTCTGCAA GGATAGAAAA TGAAGTGGA CTCTTAGGAG      120
AACATCTTCC AGTAGGAGGT TTTACTTACC CTCCATCAGC CCACCCCCCA ACATTACCTC      180
CATCAGCTCC CTTGCAGTTC TTAACACATG ATCCTTTGCA TCAGGAGGTG TCCTTTGGAG      240
TACCTTATCC TCCATTTATG CCTCGGAGGC TTACAGGATA GTAGATACCG ATCCAGCAG      300

```

```

CCAATACCAC CTCCCCCTTA TCATCCCAGC TTA CTGCCAT ATGTGTTATC AATGCTTCCA      360
GTGCCACCTG CAGTGGGCCC AACTTTCAGC TTGAATTAG ATGTAGAAGA TGGAGAAGTA      420
GAAAATTACG AGGCCCTGTT AAACCTGGCA GAGCGACTGG GAGAGGCAAA GCCTCGTGGA      480
CTGACTAAAG CAGATATTGA ACAACTTCCT TCTTATCGGT TCAATCCTAA CAACCACCAA      540
TCCTCGAG                                         548

```

(2) INFORMATION FOR SEQ ID NO:1302:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1302:

```

GAATTCGGCC TTCATGGCCT AGTATCTATC TAGTGCCTGT TTGTGCGTTT TTTTCTTTCT      60
TCCGCTGCTT CCCCATTTTC CTCTGTCTCT TTTCTCCTG CTCCTTGTTT TCCCAGCAGC      120
ACATGGGGTT CCTCGGAGGA GCAGAGGTGG CCGCCGTGGG GGGGCGTTTG GGCTGCGGTG      180
CTGCGTCATT TTTCCTTTGC TTTCTCTTTA CTTTAGACAC TGGCCCAACT CCAGGCGTTT      240
CCTTTCATTG CCTCAGTGCT TCTCTTCTGA CCTGCATGTT GAGTTCTGTA TTGCTGGGGC      300
TTCCAACAAA AACCAGAGTC ACTGACAGAG GGAACAGCAG AGACCTTGTT GGTATTCAGC      360
TGTGATGGAT ATAGCGATCT CGAG                                         384

```

(2) INFORMATION FOR SEQ ID NO:1303:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1303:

```

GAATTCGGCC AAAGAGGCCT AGGGTACGTG AATCTATTTT TTCAGCTGGA AATTTTATGA      60
AATCTGGTGT GTATTTTATA CTTATAGCAT ATCTCGAGGC AGGTCTAAAT TCAATCTAG      120
ACCTGCCTCA AGAGCTCGAG                                         140

```

(2) INFORMATION FOR SEQ ID NO:1304:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 620 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1304:

```

GAATTCGGCC AAAGAGGCCT AAATAAGTTT ACTTTTATTT TTGGTAACAC TTTACTGCAT      60
TGTCTGAATA TTGACAATCA GTATGCATTA TGAAGCTACC TGGCTAACAT TGTGTACTCA      120
CTGTGTGTGC CAGGCCCTGG GTTCAATGCT CTACATGCAC TTATATTTCA TTTAATTCTC      180
TCTGCAACCT GAGATGGTAT AGCCACCTCA TTTTACAGAG TTGAAACTGA GGCTCAGAGA      240
CTGAAAGTTA AGCCTGAGGT TGCAGTCAAT AAGAGGCAGA GCTGGAACCT AAACCTACCT      300

```

GTGTCTGACC	ACCACTTCGT	GTTCTGACGG	CAGGCTAGTC	TGCATCACAG	AGTGTGGAGT	360
AGATGGTGCA	TGCCTGCTAG	GATGGGCTAG	GTATCACTGT	AGGTAAGAAA	CAGCCCCAAA	420
CTATGGAAAT	GTACACCACC	GAAGGCTCTT	TTCCTGCCCA	TGCTGCACAT	CCTCCATGGC	480
TCTCCTGTGC	CCTGTGCCCC	ACATGCCCTC	ATCCTGCCAC	GAGAATAAAG	GAGCAGCCTC	540
CATATGGGAG	CTGTGAGCTG	CTCTAAGAGA	TGAAGGAGAG	AGTGGCCCGT	CTCAATGGCT	600
CCCAACTCTT	CTGCCTCGAG					620

(2) INFORMATION FOR SEQ ID NO:1305:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 736 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1305:

GAATTCGGCC	AAAGAGGCCT	ACTTTTGGCT	CAATGTTTTC	CAAACCTATT	TGACCCCAAA	60
ACCTTTTTC	TATACCCAAT	AATAAGCTAC	AGAACTAATA	TTCTGCAAAT	GTCTCTTGGA	120
ACACACTGCC	TTAAACAGAT	ATTCTATAG	CTGTCAGTAT	AGTTATGTTG	CTCCCAAGCC	180
TAGTTATCTC	CAGTTGTTTT	AAGGGTGTTA	TGAAAAATTC	TTAAAAATATA	TATGAATTTG	240
TGTAACACAC	ACAGAGACAC	ACACACATAC	TACTTTAAGG	GGGTGAGGAT	CATTAATTCA	300
GATAATTTT	AAGTTTCCTA	GTGATTCTCA	ATCTCTTTGA	ATTTTACTTA	CATTACACA	360
CACACGCACA	CACATATGTA	TATACACATA	TCATTTTAAG	AAGCTGAGGA	TCACTAATTC	420
AGATAATGTA	TAAGTTTCCC	AGTGATTCTC	AACCTCTTTG	AATTTTACTT	ATAATTACAT	480
ACACACACAC	ACTGCTACTT	ATATAAATGT	TCTCATGTAA	TCATGGTAAC	AGCTCAAATT	540
CCCAAAGCAA	GGGAAGACTT	CTCATTGTCA	GTTAAACCTG	TTAAACATG	AAAATATTCA	600
TTGAGCCTAG	TTCTTTGTTA	TAAAATACAA	GAAATAAGAC	ATTCAGGCAT	TTTCCCTTTA	660
TGAAGATGTT	CAGTCATCCT	TTCTTGAAC	TACAATTAGG	AAAAGTATAT	GTCTTTATTC	720
CATTGAAGTT	CTCGAG					736

(2) INFORMATION FOR SEQ ID NO:1306:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 511 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1306:

GAATTCGGCC	AAAGAGGCCT	ACAGCAATAT	GCATCTTGCA	CGTCTGGTCG	GCTCCTGCTC	60
CCTCCTTCTG	CTACTGGGGG	CCCTGTCTGG	ATGGGCGGCC	AGCGATGACC	CCATTGAGAA	120
GGTCATTGAA	GGGATCAACC	GAGGGCTGAG	CAATGCAGAG	AGAGAGGTGG	GCAAGGCCCT	180
GGATGGCATC	AACAGTGGAA	TCACGCATGC	CGGAAGGGAA	GTGGAGAAGG	TTTTCAACGG	240
ACTTAGCAAC	ATGGGGAGCC	ACACCGGCAA	GGAGTTGGAC	AAAGGCGTCC	AGGGGCTCAA	300
CCACGGCATG	GACAAGGTTG	CCCATGAGAT	CAACCATGGT	ATTGGACAAG	CAGGAAAGGA	360
AGCAGAGAAG	CTTGCCCATG	GGGTCAACAA	CGCTGCTGGA	CAGGTTGGGA	AGGAGGCAGA	420
CAAACCTGATC	CATCATGGGG	TCCATCACGG	GGCCAACCAG	GCGGGAAGTG	AGGCAGGGAA	480
GTTTGGCCAG	GGAGTCGACA	ATGCACTCGA	G			511

(2) INFORMATION FOR SEQ ID NO:1307:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 219 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1307:

GAATTCGGCC AAAGAGGCCT AATTTTCC CACACCACAC CACTGTCCTC TGTGCTGTG	60
GAAACCACTC AAATGCCTCT CCCCAAGCCT TCTTTCAGTA ACAACCATCT CATCCGTTG	120
ATTACTGTAG CTTTCGGCCT GTATAACCC TCCTTATGTC ATGCCTGTAC CAGATGTTCC	180
ACTGCATCTG TATCCCACCA GATTGCACAT ACTCTCGAG	219

(2) INFORMATION FOR SEQ ID NO:1308:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 344 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1308:

GCACTGCGCC TGGCCCTTGT GGATACTTTC TAGGTGATTT GAGGAGGAAA GGCACAGCCA	60
TGTCTCCTAA AGTTAACAAG CACTAAGCTT TCCCAAGTAG TGAAATGTCA AGCCTCTGCT	120
TCTGTCACTT ATTGTTCAT TCAGCAGAAA GTCACAGAGA GCCTTCTGTA CACCAGGCAC	180
AGTGTGGGC AGTGAAGAG ACAGACATGT CCCTGGATCC AGGGAGGAGA TGACCAAGTG	240
ATGGCTGTCA GGGCCAGACC TTGCTGTTT TCTGCAGCCT CTTCCCTCAG GCAACTTGT	300
CTCTATCAGG AGAAATGAAA TAATTATTAT CTGGAGCTCT CGAG	344

(2) INFORMATION FOR SEQ ID NO:1309:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 565 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1309:

GAATTCGGCC TTCATGCCTA AAAAGGGTCA GAGGAAGGCA GTATCCTTGG GGTGTTGCTG	60
AAGTTGAAAA TGGTGAACAT TGTGATTTTA CAATCCTAAG AAATATGTTG ATAAGAACAC	120
ACATGCAGGA CTTGAAAGAT GTTACTAATA ATGTCCACTA TGAGAACTAC AGAAGCAGAA	180
AACTTGCAGC TGTGACTTAT AATGGAGTTG ATAACAACAA GAATAAAGGG CAGCTGACTA	240
AGAGCCCTCG AGTTGCAGGG AGCCCAGATC ATGCCACTGC TCTCCAGCCT GGGTGACAGA	300
GCAAGACTCT GTGCCCCCCC CCCACCCCAA AAAAAAAGAA AACAAAAATT AAAATCTTTA	360
GTTACTGTAT TATTCAAAAA TGTCTACTTT CAAGAAAAAC TACAGCCATG CAAAGAAACA	420
GTAAAAATGTG ACCATACTCA GGAAAAAAG CAGACAATAG AAATGGCTTC TCAGTAGGGC	480
TATATGTTGG ATTTAGCAGG CAAAGACTTC AGAGGCCTTT TAATAAGTAT ATTCAAAGAA	540
TTACAGGAAA ATATGAAAC TCGAG	565

(2) INFORMATION FOR SEQ ID NO:1310:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 104 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1310:

TGCACAGCTG TAGTACCCCA AGAAGAAAAT GTTACTTCTC TCATCTGGGC AAAACCCACA 60
GAAGACTTCC CAGCTTCTGC CACATAAAAG ACACAGAACT CGAG 104

(2) INFORMATION FOR SEQ ID NO:1311:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 105 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1311:

GAATTTTGCG TTCTGTTTAG CATGCTATCC TGTGTGAAAG AACTGAAAT CCAATATTAT 60
GGAGAGTATG TTAAGCCAC CTCTGAAATG AAGACCACTC TCGAG 105

(2) INFORMATION FOR SEQ ID NO:1312:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 407 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1312:

GAATTCGGCC TTCATGGCCT AAAGGGAAGG GAGGTGTGAG GAGGATGGAG TAAGAGTGAG 60
AGGTCCTAAG AACATGGAGG GAGGCTGTGT GTGATCGATG GAGAAATATG GTCCTGAGAG 120
ATTTCTTGTA GTCAAGAATG GCCAATACAT GTCTACCTTT AACTGGTATT GGAAGGAAGT 180
AGTTTCTGCT TCTGTGCTCT AAATACTCTC TATTACCCTC AAGATGTCAG CAAAATGTGA 240
TACATAGCAA TCTTGTGTTA GAGATGCTTT AGGAATTGCA GAAAAACCAT GCTATCAAGT 300
GGTAGGGAAG TGAGTGGCAA GAGGATGTCT GTCACAGAAA CTAGGGATAG AGGGGCTGGC 360
AATGGCAGAG ATGCAGGTGG AGTGGACTGA TTAAGGGGAG TCTCGAG 407

(2) INFORMATION FOR SEQ ID NO:1313:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 292 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1313:

GAATTCGGCC TTCATGGCCT AGGTCTTGCC ACATTGGCCA GGCTGGTCTC GAACTCCTGG 60

```

GTTCAGTAG TCCTCCACCT CAGCCTCTCA AAGTACTGGG ATTACAAGCG TTGAGCCACC 120
CTCCCAGCCT TTGCCTTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT 180
ATAGACCCCT TAAGAGAAGG GATGCTATGG GCAGGAAGAG ATTGAAGGTA AAGGAAAAAG 240
GATTGAGCAC CCAAGCAAAA CAATTGGCCT GTGATAGAAG GGCGATCTCG AG 292

```

(2) INFORMATION FOR SEQ ID NO:1314:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1314:

```

GAATTCGGCC TTCATGGCCT AGATCCAAGA AGCTCAACAG ACCTCAAGTA GGATAAACAC 60
AAACAGATCT TCACTAAGTC CTACTGCTGA AAGACAAAGA CGAGGAGAAC ATCTTGAAAG 120
CAGTGAGAGA AAAACAACCT ATTATGGAGA GAGCAATGAT AAAATTCTTA TCAGAACAGT 180
GGAGGCCAGA AGGAAATAGA GTGACATATT CAAAATGCTG AAGGAAAAAT TTGCAACTAC 240
AAGTTCTAGA TCCAGCAAAA TTATCCTTCA AGAATGAAGG TTAGTAAAG ACATTCCCAG 300
ACCCTCGAG 309

```

(2) INFORMATION FOR SEQ ID NO:1315:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1315:

```

GGCCCCAGCT CCTGAGTAGC TGGGATTACA GGCATGCACC ACCACACCCA GCTAATTTTG 60
TATTTT TAGT AGAGACAGGG TTTCACCATG TTGGTCGGGC TGGTCTCAAA CTCCTGACCT 120
CAGTGATCCA CCCGCCTTAG CCTCCCAGAG TGTTAGAATT ACAGGCGTGA GCCACTGCAC 180
CCGGCTGGGA AACATTTTAA AAACGGCGCA GGGTTGTCCT TGAAAGTCCC AGGTTTCCTC 240
ATTGGCCCTG CCATTGGCGG GTGGGTGATT TCAGGCAGGA CACGCAGTGT CTGGGGACCC 300
TGGCTTTCTC ACTGGAAGAC GATTGTTATG GTCCAGAGGG TGGTAACTCA GGTGTTTCATG 360
TCTGATTCTG GATGTTCTCT GCAGCTGCTG GAGTCTCCTG ATTGGAGAGC AGCAAATGAC 420
TGTTCAATGA CAGTTCTAGT TGTACCTCTA GCACCCCCAC TCGCTCGAG 469

```

(2) INFORMATION FOR SEQ ID NO:1316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1316:

```

GAATTCGGCC TTCATGGCCT AATCTATGTG TGTCAACTTT CATAGAACCC TACACCAAAA 60
AAGGTGAATT TTATTCGTG ATAAATTAAA AAGTAAACA AAAGAGACAA AAATAGTAAC 120

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CAGGGAAGCT TTCAAAAAAT ATATGTTCTT GTTCAAGACC AGCATGGCCA ACATGGCGAA	180
ATCCCATCTC TAATAAAAAAT AGAAAAATTA GCCAGGCGTG GTGGTGGGCG CATGTAGTCC	240
CAGCTATCCA GCACCGCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:1317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1317:

GAATTCGGCC TTCATGGCCT AAAGGAATGG TATTTTGGCA ACGCAGACAA AGAAAGGAGT	60
GGCCCGTATG GATTTCATGA GATGCAAGAA TTGTGGACCA AAGGAATGTT AAATGCAAAA	120
ACCAGATGCT GGGCTCAAGG CATGGATGGA TGGCGACCAC TTCAGTCCAT ACCCCAGCTC	180
CGAGTCATAT AAGGTAACCC AGACAACCAC CTACGAATT AAAGCTCCTA TAAGTTGCCC	240
TTTCTGCATC CGAAGTGTGA TATTTGAAAG TAAAAACGT TATCTTACAT ACATAGATCT	300
TAAAACGTAT CTTACACCAC AACCTACTCA CAGATGCAAA GGCAGTGGTC GTGGTCTTCC	360
ATTGCTTGGG GTCCTGGGGC CGGGTTTGAG GCTGAATGTC AGGGTTTCCT TTGCCATAAC	420
CTCATTCTGC ACCACGTGCT GTCAGCCAGG CAGCCAATGT GGACTTGAG GCTGGCATCT	480
GCTGGGCACT GCTCGAG	497

(2) INFORMATION FOR SEQ ID NO:1318:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1318:

GAATTCGGCC TTCATGGCCT AATCTGGATG TCTGTCCAAG GCCTGACTGC TGAAGTCTTA	60
CTTTTCCTAC AAAACCTAC CCACATGGCC CTTCCTGCGG GAAGAGATCT TGAGCCTCCC	120
TGGCTATTAA GACTCTGCTG TGCAGCCTTC TTTTACTGGA CTCAGGGCTA TCTTCCCCAG	180
ACTAGGGCCT TCTTGAGGAC AATCGTGGTG GCCCAGTGGT TGACGCTGTC TCCCCTGCAT	240
GTAGTTGGTC TTCCTGGTTG CTTCCTGCCC CTGTGGCTCC CTTGGGAGAC TGAAACTCAG	300
AGGACAGCTT CTGGTCTGCT GTTACATGGC TCCCACAGGG AGACTGGCCC CACCTGTGCC	360
CCACCCATCA CAGCTAGGGC CTGGGATGGG TCAGACACTG GAAGAGCCTC CCCCTAGGCC	420
ATGCATATGG ATCGTGCCCA CAGCCTCGA G	451

(2) INFORMATION FOR SEQ ID NO:1319:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1319:


```

GAATTCGGCC TTCATGGCCT ACACTACGGT ACTCCCAGCA TATCACCCCTT AATGTAACCT 60
TAAATAACAT GGCCATTTT TAAAAAGGAC ACAGGAACTA CATAACATTT TTTTTCAGAT 120
TTTGGAAAAT TCTAAATATG TCTAGAAAAA CTTTCTTTC TGTTCCATTC TCCTTCCTAT 180
TCTCCATGAC CCCCTCCCCG CGGACTGTAT CAGGTACAGC CTGTTGAAAA TCCAGCACCG 240
CACATTAGGC ACACCACTGG TAAGTTTACT TGTTGAGTTA TCACCTTTTT TTTCTTTTA 300
ATCAGAGAGG CAGCTCTGTG TTGAAGATGC TAGGTAGTGA TGGAAAAGAC ATTAGGAAAA 360
TTTGTTACCG TGGTAACCGG GGATGGACAT CATGACCTTT TGTGATATGC ATGCTGTGGC 420
CTTGGTAGTC TCTCCCCCTA ATTAACATCC TGTGAGAAAC GTGAGAGATG ACTCGAG 477

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(2) INFORMATION FOR SEQ ID NO:1320:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1320:

```

GAATTCGGCC TTCATGGCCT AGACGGAGGC TGGAGATTCA CATGGGGCGA GGAGTTGCAG 60
ACCAGCCTGG GCAAAGCATG GTGAGGCCCC GTCTCTGCAG AAATGAGAAA ATGAGCTGGA 120
TGTAAGTGGCA CCGACATGTG GTCCCAGCTG CTGGGAGGGC TGAGGTGGGA GGATTGCTTG 180
AGCCTAGGAG TTCAAGGCTG CGGTGAGTAG ATCGTGCCAC TGCCTCCAT CCCTGGCAAC 240
AGAGCAAGAT CATTTCTCAA AAAGAAAAAA AAAGCCATCT CGAG 284

```

(2) INFORMATION FOR SEQ ID NO:1321:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1321:

```

GAATTCGGCC TTCATGGCCT AGGGAAATGT GTGATTGGGA AAGAGGCAGC TTTAAAAAT 60
GTGTCTGGCC TTTGACCACG CAATTTCACT TTCCAGTATT TATTCTAGGA AAATACTCAT 120
ACTATTGCAA AGTTTATATA TAAAGATAGT TATAACTGCA TTGTTTATCA TTTACAAAAA 180
GAAAACATCT GAAAGCCCAA CAAGACGGAA CTGTTTATTC CACATTGGCA CATTATACA 240
AGGCAATGCT CGAG 254

```

(2) INFORMATION FOR SEQ ID NO:1322:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1322:

```

GAATTCGGCC TTCATGGCCT AGGCACAGAA AAATTGGAAA GGATTGGTGG TCGTACATCT 60
TGCAGCTCAC TTAGTAGCTG CATGCATGTA GACCGGGTGG TGTTGATGCA GTGTTGACTT 120

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GCTGGCATTG GGGTGGGTGG TAGCATGGTC AAGCTGGCTG AGTGATGGGA TATTGTCTCA    180
GAGGTTGGTG CAGGGAAGCT CTGTGGGTGT GTCTAATGCA AGGATAATGA CAATGTCCTG    240
TCTGCCTGGT CTTTGGGGGG TCAGGTGGAG ATGTCCTTTT GGAAAGGCAG CCATTCTCTT    300
TGAGTGTCCA GAGGGCATGG TGCAGGCACA TGGATTGAGT GGAGGACTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:1323:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 440 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1323:

```

GAATTCGGCC TTCANGGCCT ACTGTGTGTA GAATTCTGTT TTCTCATGAT ATTGAAGACA    60
TTATTCCAGT ACTTTGACTG CTAGTATTGC TGTGAAAAG TCTTAATTGC CCTTCCTTTG    120
TAAGTAATAA CCCTTTTATT TGGCTGTGTT AAGCCTTTTT TTTTCCTTCC CATTTAGTGT    180
TTTGCACTTT TGTATAATGT ATTGAGGGCG TTATTTTTTT CATTCCATCA TTTTATTTTT    240
TGTAATCCCA CTTGGGATTC TTTGGGCTTC CTGGATCTGA GGATAATAAT AATGTCCTTG    300
AATAATTGTG GAAAATTCTT AACCATATC TCTTTGAATA ATGCCTCTTA TTTTCTCCTT    360
CTATAACTCT AATTAGACAT ATAGTCTATT TTTCATGTTA CTTATGCCTT TTCATCCTTT    420
TTCGTCTCCA CATACTCGAG                                         440

```

(2) INFORMATION FOR SEQ ID NO:1324:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1324:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TAAAATGCC AGTTACCTGA    60
AATTGTATAA ATTCTTGCCA AAAGTGTGTT AACTTAATAC AAACCTCCCA TCTCTTACCT    120
CTTAGCACTG TGCTCATCTT GAGGGGACAT AGTCCCAATT TTGTATTTTA TATAACTACTG    180
TTAATGAATA TGTGTAGACT TCATATGGTT GTGGGTAAGA GAATACTGCA TTCAGATAGA    240
AAAGATGCTA TATAGCTAAG TTGATCCGCG GATCCTCGAG                                         280

```

(2) INFORMATION FOR SEQ ID NO:1325:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1325:

```

GTTTCCTTTT CTACTIONCAA AGAAAATAAA TAGAAATAGA TTTTACATGC TTTATTTCTT    60
TGAGACAAGC CATTGTAAAT TGTTACTAGA CTAAGTAGTA GTATACCACT CATTGACTGG    120
TCTTTTCAAC TCCACTCAAA TTTGTAAAAA GCAATTCCTC TTATACTATC ATCTTTTTTG    180

```

TTTTTTAAGG TTTTGTGTGT TGTGTTGTTT TTTGGCAAAA CATGATACAT TTCTCATGCT 240
 TGATCTAAAG AGGCTTTACA TAAGAGACAG AGTCGCTCGA G 281

(2) INFORMATION FOR SEQ ID NO:1326:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1326:

GAATTCGGCC TTCATGGCCT ACTATCTTGA ATGTCCAACCT CCAACTCCTA ATTATTTTAA 60
 AAATCTATGC ACTTCTTTCA CTTGAATTTT TATGCCCTCA TAGACTTTAC AGGCACATGT 120
 TCTATCACCA ATTAAGAGAA ATTTAACTTA CACATTTTAC AACTTATACA TGCAATTTGG 180
 CTGAGCTTAT ACAGCACAGA TCAACATTAC AATCAATTTA CTGCCATGTT AAAAAAAAAA 240
 TCAGTGAACA TTGTTGCGCT GACCTAATT TTTGAAATAA GTTGGCCATC AGTGTAATTG 300
 ATTGAGCTAT CTGTACAACC CCCAACCTAC CTAAGCAAAG GGCTCGAG 348

(2) INFORMATION FOR SEQ ID NO:1327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 680 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1327:

GAATTCGGCC TTCATGGCCT ACACGGACTT ACATCCTCAT TACTATTCTG CCTAGCAAAC 60
 TCAAACTACG AACGCACTCA CAGTCGCATC ATAATCCTCT CTCAGGACT TCAAACTCTA 120
 CTCCCACTAA TAGCTTTTGT ATGACTTCTA GCAAGCCTCG CTAACCTCGC CTTACCCCCC 180
 ACTATTAACC TACTGGGAGA ACTCTCTGTG CTAGTAACCA CGTTCTCCTG ATCAAGTATC 240
 ACTCTCCTAC TTACAGGACT CAACATACTA GTCACAGCCC TATACTCCCT CTACATATTT 300
 ACCACTAACC CTCGAGACCA CTTCATATAA ATACTTATTT ATTTCTTATT TCCCCTGACT 360
 AGAAATATAA GCTCCATGGT AGCAGAGATT CTGATTGCTG CCTACTCTAT CCCCAGCTCC 420
 TATACTAGGC ACCATGAGTA CATGATCAGA AAATATTTCAT GGAAAAAAT ACATAAATGT 480
 ATAACAATCT TCATTTGTGA GTAAGAAGAT GGGCTCTGGA ATCAGACTGC CTGGATTGAA 540
 ATCCTAACTT CATCACTTAC TAGTCATGGG ATATTTTACC TCAGTTTCAC TTTTGGAAAA 600
 TGAAGATAAT AATGTCTACC TTATAGTATT GTGAGGATTA AGTGAATTAA TGCACACAAA 660
 ATTAGGCCAT GAAGGCCGAA 680

(2) INFORMATION FOR SEQ ID NO:1328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1328:

GAATTCGCGG	CCGCGTCGAC	TGTCACCTGAG	CTTCTTGGCT	CTCTTATATA	TATTCTTTAT	60
TGTCATTTAC	TTTGGTGGAC	GAAGAGAAGG	AGAGAGTTGG	AATTGGGCCT	GGGTCCTCAG	120
CACTAGATTG	GCAAGACATA	TTGGATATTT	GGAACCTCCTC	CTTAAATTGA	TGTTTGTGAA	180
TCCACCTGAG	TTGCCAGAGC	AGACTACTAA	AGCTTTACCT	GTGAGGTTTT	TGTTTACAGA	240
TTACAATAGA	CTGTCCAGTG	TAGGTGGAGA	AACTTCTCTG	GCTGAAATGA	TTGCAACCTT	300
CTCGGATGCT	TGTGAAAGAG	AGTTTGGCTT	TTTGGCAACC	AGGCTTTTTC	GAGTATTCAA	360
GACTGAAGAT	ACTCAGGGTA	AAAAGAAATG	GAAAAAACA	TGTTGTCTCC	CATCTTTTGT	420
CATCTTCCTT	TTTATCATTG	GCTGCATTAT	ATCTGGAATT	ACTCTTCTGG	CTATATTTAG	480
AGTTGACCCA	AAGCTCGAG					499

(2) INFORMATION FOR SEQ ID NO:1329:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 200 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1329:

GAATTCGCGG	CCGCGTCGAC	CGCTGCCAAA	TGCTTCACTC	CTATCTACTC	TCCCGATTCC	60
TTATACTTCT	GAACCTCCTC	AACAGAAATC	TTGCTCTCTC	CCTAAATCCT	CAGTGCAACA	120
TACGTCCGCA	AAAATAAAT	GATCCCTCCT	CAGCCAGACA	GAAAACCTCTC	AACATATCAA	180
CACTCCCAAG	GCGTGGACAG					200

(2) INFORMATION FOR SEQ ID NO:1330:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 158 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1330:

GAATTCGGCC	AAAGAGGCCT	ACAGTCTTTT	TAGGCATGTT	TTTTTTTTTT	TTGGTGTGTG	60
TGATGACAGG	AATATGCATT	TTATCTGTAG	TGGTTTTTAA	TCCTGTATTA	AGCGTTGTTT	120
TCTTTTCAGA	CTGCAAAATT	CAAAATGGGG	CTCTCGAG			158

(2) INFORMATION FOR SEQ ID NO:1331:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 552 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1331:

GAATTCGCGG	CCGCGTCGAC	GATCATGAAG	CGCTCGGTAG	CCGTCTGGCT	CTTGGTCGGG	60
CTCAGCCTCG	GTGTCCCCCA	GTTGGGCAAA	GGTGATATTT	GTGATCCCAA	TCCATGTGAA	120
AATGGAGGTA	TCTGTTTGCC	AGGATTGGCT	GATGGTTTCT	TTTCTGTGTA	GTGTCCAGAT	180
GGCTTCACAG	ACCCCAACTG	TTCTAGTGTT	GTGGAGGTTG	CATCAGATGA	AGAAGAACCA	240

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ACTTCAGCAG GTCCCTGCAC TCCTAATCCA TGCCATAATG GAGGAACCTG TGAAATAAGT    300
GAAGCATACC GAGGGGATAC ATTCATAGGC TATGTTTGTG AATGTCCCCG AGGATTTAAT    360
GGGATTCACT GTCAGCACAA CATAAATGAA TGCGAAGTTG AGCCTTGCAA AAATGGTGGA    420
ATATGTACAG ATCTTGTGTC TAACTATTCC TGTGAGTGCC CAGGCGAATT TATGGGAAGA    480
AATTGTCAAT ACAAATGCTC AGGCCCACTG GGAATTGAAG GTGGAATTAT ATCAAACCAG    540
CAATCCTCG AG                                                    552

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(2) INFORMATION FOR SEQ ID NO:1332:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 760 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1332:

```

GAATTCGCGG CCGCGTCGAC CTCAGAACTA TTAAATTTA GTTAAATTAC TATTATATTT    60
TATAGTAAAT ATTGGTCCAC TTTATAGCTC AGAACCTAAA AAGAGAATAT GTACCCAAAC    120
TTCTCTATGT TTACAACCAA CCCAGAGTTT AAGATTCTGA ATTGTGCTTT GTTTTGTTAA    180
AAATTTAACC AAGGGTCAGG CACAGAGGCT CATGCCTATA ATCCAGCGC TTTGGGAGGC    240
CGAGGCGGGT GGATCACTTG AGTTCAGGAG TTCGGGACCA GCCTGGCCGG CATGGTGAAA    300
CCCCGTCTCT ACTAAAATA CAAAAGTTAG CCGGGTGTGG TGGCATGTGC CTGTGGTCCC    360
AGCTGCTTGG GAGGCTGAGG CAGGATAATC NCTGAACCC AGGAGGCAGA GGTGTCANTT    420
GCAGTGAGCC GGGATTGTGC CATTGTACTC CAGCCTAGGC AACAAGAGCG AAACCTCTGTC    480
TTAAAAAAA AAAAGAAAAA AAAATTAACC AAGGTTCTCC TTTCTCTAAA TCTAGCAATT    540
TGTTCTATTT TTCAGAAATA AACTTAATAA TTTAATACA GATTTTAGCT TTGGCTTTTT    600
TCTTACTTTT TAGTTTGCAA ATTATTTTAT GGTATTCCTA CAAAGTAGAT ACAAATTTGC    660
ATTCAGAATG CACCTTTTGT TTTTCTGGGT TTTTGTGTTT GTTTGTTTGT TTTTTCAGAA    720
AACTCATGGA AAAGTACACT GTTCACCTCA GCATCTCGAG                    760

```

(2) INFORMATION FOR SEQ ID NO:1333:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1333:

```

GAATTCGGCC AAAGAGGCCT ANAACTGGGT AAGGAGCAAA AAAAGTGACA GAGGCCAGGC    60
GCGGTGGCTC ATGCCTACAA TCCCAGCACT CTGGCCAAAT ATTTGATTTT AAATCCCAT    120
TGTTACTGAT TAAAAAATAA AAAAATCTGG ACCAGTTAAC CTGGAGATTT AGAGGCTATA    180
GACACAATTT AACATCCATA CAGGCCTGTG AACTTCATGC AGAGAACAAA CAAACAAACA    240
AAAACTCTAA TTCAGAGTCT CTCATTTCAG CTTAGCCAAC ACATTGGAG ACTTAGGGGC    300
CAGTTCTAGA AGCTGCTTTT ACCTCTAGAC TCGGAGGGGC AGGCCCTGTC ACCGAAGGGA    360
GGAAACTCT TCTTGGCTGT CAGCCCGGAT TGAAGCCACT TCGCTTCCCC TGGCCCCAGC    420
TTTCCTGCAC TCTTTTCACC GTGTCTGACA CAGGGCAAAC CACCAACCAC TCAAATGAGC    480
AAACAATTCC AGAAAAAGA ATCCGAGATA AAGAATAACC AACTAGGAGT CTTTCCATTG    540
TAGCCTAAAC CGTCGATTGA ATTCTAGACC TGCCTCGAG                    579

```

(2) INFORMATION FOR SEQ ID NO:1334:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1334:

GAATTCGCGG	CCGCGTCGAC	CAACAAGGGC	AAAGGCCTTG	AGACACAAAC	CAACTGTGTG	60
GGTGTAAGG	TAAGAAAGGC	CAGTGAGGCC	AGCATGATGA	ACTGGGGGAG	CATGGTGGCT	120
GATTTGGTCA	GGAAGGGAAC	AGAAACCAGA	CCACTTGGGA	TCTTCTAGCC	AGAGTAAAGA	180
GACTGAGTTT	ATTCTATG	TAATGGGAG	CTATTGAGAG	AGGTTAATCA	TGGAAGTGAT	240
GTGACCTGAG	CTACACTCTT	AAAAGATGCC	TCTGGCTGCT	GTGTGGAGAA	TGAACCATGG	300
GGGCAAAAGC	AGAAACAAGA	AGACCACTTA	AGAGGCTCTT	GCAATAATTT	ATGTGAGAAG	360
AGTGATCATC	TTGACTAGGG	TGGTGGTGGT	AGAGGAGGTG	AGTGGTGGTC	AGGACTGAGA	420
GGAGCCAACA	GAATTTGCTG	GCTTGCTTGG	ATGTGGGTGA	TGAGGCAAAAC	TGAGAATCCA	480
AGATGGCACC	AAGGCTTATA	CCCTGAGCAA	CTGAACCTGA	G		521

(2) INFORMATION FOR SEQ ID NO:1335:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 775 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1335:

GAAATTCGCG	GCCGCGTCGA	CGCTCTTGAG	TGAGACCCAA	CAAGCTGCTT	TTCACCAAAT	60
TGCAATGGAG	CCTTTCGAAA	TCAATGTTCC	AAAGCCCAAG	AGGAGAAATG	GGGTGAACCT	120
CTCCCTAGCT	GTGGTGGTCA	TCTACCTGAT	CCTGCTCACC	GCTGGCGCTG	GGCTGCTGGT	180
GGTCCAAGTT	CTGAATCTGC	AGGCGCGGCT	CCGGGTCTCTG	GAGATGTATT	TCCTCAATGA	240
CACTCTGGCG	GCTGAGGACA	GCCCCTCCTT	CTCCTTGCTG	CAGTCAGCAC	ACCCTGGAGA	300
ACACCTGGCT	CAGGGTGCTG	CGAGGCTGCA	AGTCCTGCAG	GCCCAACTCA	CCTGGGTCCG	360
CGTCAGCCAT	GAGCACTTGC	TGCAGCGGGT	AGACAACTTC	ACTCAGAACC	CAGGGATGTT	420
CAGAATCAAA	GGTGAACAAG	GCGCCCCAGG	TCTTCAAGGT	CACAAGGGGG	CCATGGGCAT	480
GCCTGGTGCC	CCTGGCCCCG	CGGGACCACC	TGCTGAGAAG	GGAGCCAAGG	GGGCTATGGG	540
ACGAGATGGA	GCAACAGGCC	CCTCGGGACC	CCAAGGCCCA	CCGGGAGTCA	AGGGAGAGGC	600
GGGCCTCCAA	GGACCCAGG	GTGCTCCAGG	GAAGCAAGGA	GCCACTGGCA	CCCCAGGACC	660
CCAAGGAGAG	AAGGGCAGCA	AAGGCGATGG	GGGTCTCATT	GGCCCCAAAG	GGGAAACTGG	720
AACTAAGGGA	GAGAAAGGAG	ACCTGGGTCT	CCCAGGAAGC	AAACAGAGAC	TCGAG	775

(2) INFORMATION FOR SEQ ID NO:1336:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 155 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1336:

GTAGATTTAG	ATGTACAGAT	AGAGGTATGA	TTTTTTTAAA	AGGCACCTCA	GTATGGGTAA	60
TGTTATCTTT	CTTGTGTTTC	AGTGACACAC	CATACACACA	CACCATAGAT	GCAAAGTGTG	120
TAGAAAATGT	ATTGAAGGAT	ACCCAGGTAC	TCGAG			155

(2) INFORMATION FOR SEQ ID NO:1337:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1337:

```

GAATTCGCGG CCGCGTCGAC ATTCATGCAA ATAAATATAT TACTAAAATG CTACCTGTTT      60
CTTTTTCCTC TTTTCTTCC AGTTTATGTT TATGAGATTG GGTCTTGCTA TGCTGCCCAT      120
GCTAGGCATG AACTCGAG                                     138

```

(2) INFORMATION FOR SEQ ID NO:1338:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1338:

```

GAATTCGCGG CCGCGTCGAC CTAAACCGTC AATTCTTCCC ATCTTAGGTT TCTCTCCTCG      60
GAAGCCTTCT CTTAGAATC GAACATTTTC TCTTCTGGCT TTGTTCGGAT GGTTCCTGGT      120
CTGTTTCTTT CTGCTCCCT CGTGGCTTTC ACTTCTGTTT TCTTCCCAG AATGACGGTC      180
CTCTCATTTG ACCGTGTGCT TTCCGAAGCA CCTGCTGCCA CCTTGTCTCG GCGATCCCGG      240
TTACTCGAG                                     249

```

(2) INFORMATION FOR SEQ ID NO:1339:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1339:

```

GAATTCGCGG CCGCGTCGAC AAAACAACAC ATTTTAAAGA TTACGTGCTT CTGGGTACAG      60
GTTTGTGAAT GACAGTTTAT CGTCATGCTG TTAGTGTGCA TCCTCGAG                     108

```

(2) INFORMATION FOR SEQ ID NO:1340:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 652 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1340:

GAATTCGGCC	AAAGAGGCCT	AATAGAAGGC	ATTCCATATT	TGTTCAATGA	ATTAACAAAT	60
GTTTTTCATA	TTAATTGTTC	TGATTTTAC	CTCCTTAGGC	CAGCCTTAT	TATTGCCATA	120
TAAGCCTTCT	GGTAGTACCA	AGATGTATTA	TGTTCCACAA	TTAAGACAAA	TTCTCCATC	180
TCCGGATTCC	AAATCAGATA	CCACCGTTGA	AAGCTCCCAT	TCAGGATCCA	ATGATGCCAT	240
TGCTCCAGAC	TTCCCAGCTC	AGGTGCTAGG	CACAAGAGAT	GATGACCTCT	CAGCCACTGT	300
TAACATTAAA	CATAAAGAAG	GAATCTACAG	TAAGAGGGTA	GTGACTAAGG	CATCCTTGCC	360
AGTGGGAGAA	AAACCCTTGC	AGAATGAAAA	TGCAGATGCC	TCAGTTCAAG	TGCTAATCAC	420
TGGGGATGAG	AACCTCTCAG	ACAAAAACA	GCAAGAGATT	CACAGTACAA	GGGCAGTGAC	480
TGAGGCTGCC	CAGGCTAAAG	AAAAAGAATC	TTTGACAGAA	GATACTGCAG	ATTCCAGTGC	540
TGCTGCTGCT	GCAGAGCACT	CAGCTCAAGT	AGGAGACCCA	GAAATGAAGA	ACTTGCCAGA	600
CACTAAAGCC	ATTACACAGA	AAGAGGAGAT	CCATAGGAAG	AACGACCTCG	AG	652

(2) INFORMATION FOR SEQ ID NO:1341:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1341:

GAATTCGGCC	AAAGAGGCCT	ACGTGCCATT	TCTCTTCCAC	TATGAGAGGA	CCGATTGTAT	60
TGCACATTGG	TCTGGCTTTC	TGTAGCCTTC	TGCTTTTCAG	CGTTGCCACA	CAATGTCTGG	120
CCTTCCCCAA	AATAGAAAGG	AGGAGGGAGA	TAGCACATGT	TCATGCGGAA	AAAGGGCAGT	180
CCGATAAGAT	GAACACCGAT	GACCTAGAAA	ATAGCTCTGT	TACCTCAAAG	CAGACTCCCC	240
AAC TGGTGGT	CTCTGAAGAT	CCAATGATGA	TGTCAGCAGT	ACCATCGGCA	ACATCATTAA	300
ATAAAGCA TT	CTCGATTAA C	AAAGAAACCC	AGCCTGGACA	AGCTGGGCTC	ATGCAAACAG	360
AACGCCCTGG	TGTTTCCACA	CCTACTGAGT	CAGGTGTNCC	TCAGCTGAAG	AAGTATTTGG	420
TTCCAGCCAG	CCAGAGAGAA	TATCTCNTGA	AAGTGGANTT	GCCAAGGCCA	TGTTAACCAT	480
TGCTATCACT	GCGACTCCTT	CTCTGACTGT	TGATGAAAAG	GAGGAACTCC	TTACAAGCAC	540
TAACTTTCAG	CCCATGTAG	AAGAGATCAC	AGAAACCACA	AAAGGTTTTT	TGAAGTATAT	600
GGATAATCAA	TCATTTGCAA	CTGAAAGTCA	GGAAGGAGTT	GGTTTGGGAC	ATTCACTTC	660
ATCCTATGTG	AATACTAAGG	AAATGCTAAC	CACCAATCCA	AAGACTGAGA	AATTTGAAGC	720
AGACACAGAC	CACAGGACAA	CTTCTTTTCC	TGGTGCTGAG	TCCACAGCAG	GCAGTGAGCC	780
TGGAAGCCTC	ACCCCTGATA	AGGAGAAGCA	CCTCGAG			817

(2) INFORMATION FOR SEQ ID NO:1342:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1342:

GAATTCGGCC	AAAGAGGCCT	AGCACCATGG	ACAACCCACA	GGCTCTGCCA	CTCTTCCTAC	60
TCCTGGGGAT	CCTCACCCCTC	AGAGCCTCTT	CTGGACTTCA	GCAAACCAAC	TTCTCCTCTG	120
CCTTCTCTTC	AGACTCAAAG	AGCTCTTCCC	AGGGGCTGGG	TGTGGAAGTT	CCCTCCATCA	180
AACCTCCCAG	CTGGAAAGTT	CCAGATCAGT	TCCTGGATTG	AAAAGCCTCT	GCTGGAATCT	240
CTGATTCCAG	CTGGTTTCCT	GAGGCCCTGA	GTTCCAACAT	GTCTGGGTCC	TTCTGGTCAA	300
ATGTTTCTGC	TGAGGGCCAA	GATTTGAGCC	CGGTTTCCCC	CTTCTCTGAA	ACCCCTGGTT	360

CTGAAGTATT TCCTGATATT TCGGATCCTC AAGTTCCTGC CAAAGACCCC AAGCCTTCCT 420
TCACTGTTAA GACCCCAGCT TCAAACATTT CTAACAAGT CTCCCATCTC CTCGAG 476

(2) INFORMATION FOR SEQ ID NO:1343:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 726 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1343:

GAATTCGCGG CCGCGTCGAC CAGGAAATGA AGACATTGCC TGCCATGCTT GGAAGTGGGA 60
AATTATTTTG GGTCTTCTTC TTAATCCCAT ATCTGGACAT CTGGAACATC CATGGGAAAG 120
AATCATGTGA TGTACAGCTT TATATAAAGA GACAATCTGA ACACCTCCATC TTAGCAGGAG 180
ATCCCTTTGA ACTAGAAATGC CCTGTGAAAT ACTGTGCTAA CAGGCCTCAT GTGACTTGGT 240
GCAAGCTCAA TGAACAACA TGTGTAAAC TTGAAGATAG ACAAACAAGT TGGAAGGAAG 300
AGAAGAACAT TTCATTTTTC ATTCTACATT TTGAACCAAGT GCTTCCTAAT GACAATGGGN 360
TCATACCGCT GTTCTGCAAA TTTTCAGTCT AATCTCATTG AAAGCCACTC AACAACTCTT 420
TATGTGACAG GAAAGCAAAA TGAAGTCTCT GACACAGCAG GAAGGGAAAT TAACCTGGTT 480
GATGCTCACC TTAAGAGTGA GCAAACAGAA GCAAGCACCA GGCAAAATTC CCAAGTACTG 540
CTATCAGAAA CTGGAATTTA TGATAATGAC CCTGACCTTT GTTTCAGGAT GCAGGAAGGG 600
TCTGAAGTTT ATTCTAATCC ATGCCTGGAA GAAAAACAAC CAGGCATTGT TTATGCTTCC 660
CTGAACCAT CTGTCATTGG ACTGAACTCA AGACTGGCAA GAAATGTAAA AGAAGCACCA 720
CTCGAG 726

(2) INFORMATION FOR SEQ ID NO:1344:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1344:

GAATTCGGCC AAAGAGGCCT AGGGACAGCA ATCAAGTTCT AATGGTGCTC ACTTTTTAGG 60
TCACCTTCAT CACAGACTGC TCCAAAGGCA GAGCAATGTG GAACGAACCA GCACATTAC 120
TTAAGATCAA AGTATGATAC ATCTCTTTGA GCGCCTCACT TCACAATAGG GATCCATTCA 180
TTGGCTTCCA GATGATGTTT ACAGTTCATG TAACACTGAT ACTGACTTTG TTCCTTATGT 240
TTAGACAGCT TCTCTGTCTA TACTTCTCAG AAACACCATC AACCAGAACA GAGCCACTTA 300
TTATCCACAA AAGTTGCATC AACCAGCTTA CCTTCTGGGA GGGATGGATG GTACCCAAAT 360
ACTCAAAGTG AATCCTATAG TGTGGAGCAA CCAAACAGAA AACAGTCCAA GGATTCAGGA 420
AATGGTAAAA ACATTTTAAA TCTAAATAGT AGTTATTTTC ATTTTGTTCCT GCTCCACCT 480
CGAG 484

(2) INFORMATION FOR SEQ ID NO:1345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1345:

```

GAATTCGCGG CCGCGTCGAC ATGAGTTTAA TTTTTTTTTT TTTTTTTACA CTTTACATAG      60
AAATAGGATT ATGTGGGCTG GGCACAGGGA CTGACGCCTG TAATCCCAGC ACGTGGAGGC      120
TCGAG                                          125

```

(2) INFORMATION FOR SEQ ID NO:1346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 760 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1346:

```

GAATTCGGCC AAAGAGGCCT AGACCCAGCG TACATACTGA ATGATCTCTA CATCTCAGAC      60
TACTGTGTGT GGATTAGAA AGTCAAATCC AAAAAGTTGG CAGCTCTTGC AGAAGCCTTA      120
AAGGAAGTCT CCCTTACAAA GGCCAGCTG GGGTTAGAAC TGAAGAAGT AGAAGCAGCA      180
GCACTGCTTG TCCAGGAGGA AGAACTGCA TTAAGAGCAG CCCATTTCAGT TTCTGGGCAG      240
CAGACACTTT GCTCCAGCTC TGAGGCAAGT GATTGGGAGG ACTCAGACAG CAGCGTGTCA      300
TCTGGAACG AAGACTCAGG CTCAGATTCA GAACAAGATG AACTCAAAGA TAGTCCATCT      360
GAGACAGTCA GTTCTTTGCA AGGTCCCTTT CTTGAAGAAA GCAGTGCCTT TCTTATTGTT      420
GATGGTGGAG TACGCAGAAA CACAGCCATC CAGGAGTCTG ATGCCAGTCA GGGAAAGCCA      480
CTTGCCCTCT CCTGGCCTCT TGGAGTGTCT GGGCCTCTGA TAGAGGAGCT TGGGGAACAA      540
CTGAAGACTA CAGTTCAGGT TTCTGAACCC AAGGGCACCA CTGCTGTAAA CCGCAGCAAT      600
ATTGAGGAGA GAGACGGCTG TCAGACACCA AATAATTGAC TCTTAGGTGG TTTTATTCAT      660
TGTTGAGAAA TATGGTAGAT TGGGTTTCAT TTACCGAATG AGAATTCTTC ATTTTCACTT      720
TGTAATTTTT CTTAGTATAT AGTCAGCCCA CACTCTCGAG      760

```

(2) INFORMATION FOR SEQ ID NO:1347:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1347:

```

GAATTCGCGG CCGCGTCGAC CATTCGAGA GTCCGTCTTG TAAATGTTTG GCACTTTGCT      60
ACTTTATTGC TTCTTTCTGG CGACAGTTCC AGCACTCGCC GAGACCGGCG GAGAAAGGCA      120
GCTGAGCCCG GAGAAGAGCG AAATATGGGG ACCCGGGCTA AAAGCAGACG TCGTCCTTCC      180
CGCCCGCTAT TTCTATATTC AGGCAGTGGG TACATCAGGG AATAAATTCA CATCTTCTCC      240
AGGCGAAAAG GTCTTCCAGG TGAAAGTCTC AGCACCAGAG GAGCAATTCA CTAGAGTTGG      300
AGTCCAGGTT TTAGACCGAA AAGATGGGTC CTTATAGTA AGATACCTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:1348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1348:

GAATTCGCGG	CCGCGTCGAC	TCTAGGTTTT	CTGATTTTGA	TGGTAATATG	GTATTCTGGG	60
AAATATCTGT	CCAAATTATC	CTGATCTCTG	AACTCCTGCT	GTTGAGGTCA	GTCACCTCAC	120
ACAATACCAT	GATGACAGCT	TTATCAAGCC	AGATGCTTAG	TCAGAGCTTT	CCAAGACCCA	180
GCTTTGGTTT	TATCAGCAA	ATCCATCCTT	CCCACCCCC	ATACACACGC	CAGTTTGAGA	240
CTCCTCTCGA	G					251

(2) INFORMATION FOR SEQ ID NO:1349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1349:

GAATTCGCGG	CCGCGTCGAC	CTAAACCGTC	GATTGAATTC	TGGACCTCCT	GTGCAAGAAC	60
ATGAACCATC	TGTGGTTCCT	CCTTCTCCTG	GTGGCAGCTC	CCAGATGGGT	CCTGTCCCAG	120
GTGCAGGTGC	AGCAGTCGGG	CCCTAGACAG	GTGAAGCCTT	CGGAGACCCT	GTCCCTCAGT	180
TGTACTGTCT	CTCTCGGCGC	CATGAATGGT	CATTACTGGA	CCTGGATCCG	GCAGACCCCG	240
GGAGGGAGAC	TGGAGTGGAT	TGGATCTGTC	TATTATAATG	GAAACAGAGT	GTATCACCCC	300
TCCCTCGAG						309

(2) INFORMATION FOR SEQ ID NO:1350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1350:

GAATTCGCGG	CCGCGTCGAC	AATTACTACC	ATTGTTAAGT	GTCTCTTTAA	CTAAACTCAT	60
TGTTTTAAAG	TTTTCTCCCT	CTCTGTTTCT	AAATCCAAAT	TTCTGCTCTG	GAATATATGT	120
TAGAAGAGAT	ACATTGTGTG	GAATGTTTGC	ATTTCTTTTA	TGAAATGCAG	TATCTTTTGG	180
GGAATATTAT	GTAAATGAAA	TACCAATTAT	TTTAAAAGAG	CATTTTGTG	TGACATAGTG	240
CTTTCACAAA	CTAAACTGG	AATTTCTTTC	TTTAGTCTAT	CTATATCTTT	TGAAAAATGTT	300
GACACAGCTA	AGAAGAAGCT	GCCTGTTTCT	ATCTTAGATG	GTCTGACCCT	CAGCTACAAG	360
GTATATGCTG	ATATTCCTTG	TATGAACCGT	GTTTTCTGCT	AACATTAAAA	CATGCAAGTA	420
ATTGGTTACT	TTCTAATTTT	GTTTTTGTTT	CATAGGTCCC	ATGGCCCGTG	GACATTGTTA	480
TAAGTTTGGA	ATGTCAAAAA	ATTTATAATC	AAGTGTTTCT	TCTCTTATTG	CAAATAAAGT	540
GGGCATCCTC	GAG					553

(2) INFORMATION FOR SEQ ID NO:1351:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1351:

GAATTCGCGG	CCGCGTCGAC	TTTATTTTCAG	TGGATTCTCT	AGGATTTTCT	ATATAAAAGA	60
TGTCATCTGA	TAGAGTAGTT	TACTTCTTCG	TTTCCAACCT	GAATGGCTTT	TATTTTCATCT	120
CTTTCCTAAC	TGTCCTGGCT	AGAACCTCCT	TTACCACGTT	GAATGGAAGT	GGCAAGAATG	180
AACATCCTTG	TCTTGTCTTCT	GATTTTCGAG				209

(2) INFORMATION FOR SEQ ID NO:1352:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 525 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1352:

GAATTCGCGG	CCGCGTCGAC	AATGGCTTTT	CTTCCTTCCT	GGGTTTGTGT	ACTAGTTGGT	60
TCCTTTTCTG	CTTCCTTAGC	AGGGACTTCC	AATCTCTCAG	AGACAGAGCC	CCCTCTGTGG	120
AAGGAGAGTC	CTGGTCAGCT	CAGTGACTAC	AGGGTGGAGA	ACAGCATGTA	CATTATTAAT	180
CCCTGGGTAT	ACCTTGAGAG	AATGGGGATG	TATAAAATCA	TATTGAATCA	GACAGCCAGG	240
TATTTTGCAA	AATTTGCACC	AGATAATGAA	CAGAATATTT	TATGGGGGTT	GCCTCTGCAG	300
TATGGCTGGC	AATATAGGAC	AGGCAGATTA	GCTGATCCAA	CCCGAAGGAC	AAACTGTGGC	360
TATGAATCTG	GAGATCATAT	GTGCATCTCT	GTGGACAGTT	GGTGGGCTGA	TTTGAATTAT	420
TTTCTGTCTT	CATTACCCTT	TCTTGCTGCG	GTTGATTCTG	GTGTAATGGG	GATATCATCA	480
GACCAAGTCA	GGCTTTTGCC	CCCACCCAAG	AATGAGAGGC	TCGAG		525

(2) INFORMATION FOR SEQ ID NO:1353:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 286 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1353:

GAATTCGGCC	TTCATGGCCT	AGGCTCCTAA	AATAAATAAT	CCACATAATT	GTAAATGAAA	60
CACATCAAGG	ATTTGAGTTA	ATAGCCTCTG	AGCAGCATT	ATATAGCCAT	TAGACTGGAG	120
TATTTGTTAT	CAAGAGGGCC	AGAGAACCCA	CCGCTAAAGC	CGTAGGGTGG	GAGGAACCTT	180
GGATTGCAGC	TACATGGCTT	ATGTAGGGAG	TTTGTAACAG	CCCCAAGCTG	AAACCAGCTT	240
CTACACCCAT	GACTGTTGAG	TGATTGAATT	CTAGACCTGC	CTCGAG		286

(2) INFORMATION FOR SEQ ID NO:1354:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 572 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1354:

```

GAATTCGCGG CCGCGTCGAC CAACAAGAGC ACTGGCCAAG TCAGCTTCTT CTGAGAGAGT      60
CTCTAGAAGA CATGATGCTA CACTCAGCTT TGGGTCTCTG CCTCTTACTC GTCACAGTTT      120
CTTCCAACCT TGCCATTGCA ATAAAAAAGG AAAAGAGGCC TCCTCAGACA CTCTCAAGAG      180
GATGGGGAGA TGACATCACT TGGGTACAAA CTTATGAAGA AGGTCTCTTT TATGCTCAAA      240
AAAGTAAGAA GCCATTAATG GTTATTCATC ACCTGGAGGA TTGTCAATAC TCTCAAGCAC      300
TAAAGAAAGT ATTTGCCCAA AATGAAGAAA TACAAGAAAT GGCTCAGAAT AAGTTCATCA      360
TGCTAAACCT TATGCATGAA ACCACTGATA AGAATTTATC ACCTGATGGG CAATATGTGC      420
CTAGAATCAT GTTTGTAGAC CCTTCTTTAA CAGTTAGAGC TGACATAGCT GGAAGATACT      480
CTAACAGATT GTACACATAT GAGCCTCGGG ATTTACCCCT ATTGATAGAA AACATGAAGA      540
AAGCATTAG ACTTATTCAG TCAGAACTCG AG                                     572

```

(2) INFORMATION FOR SEQ ID NO:1355:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1355:

```

GAATTCGCGG CCGCGTCGAC TGAAAAGTAG GTTTTGAAG AGATATATTC GAAATATATT      60
TTTTCACTTG AAAAAAGTAA AAATTTTTTT CAAAAGCAAA TAATTCAACT CTAAAATTAT      120
ACTATTTCAA CATTCCTATT TATGTGAAAG CATGTGATAA ATTGTTGCTG CGTCAGAGAT      180
ATGAGAAACT CCTTTGCATT AGGTGGGCAT TATTCATAGA CTTCTACATG AAAGAGAAGA      240
GAAATAAAAG ATGCACCAGG ATTCTCGAG                                     269

```

(2) INFORMATION FOR SEQ ID NO:1356:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 713 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1356:

```

GAATTCGCGG CCGCGTCGAA CCCAGCAAAA TGGGGATCTC CACAGTCATC CTTGAAATGT      60
GTCTTTTATG GGGACAAGTT CTATCTACAG GTGGGTGGAT CCCAAGGACT ACAGACTACG      120
CTTCACTGAT TCCCTCGGAG GTGCCCTTGG ATACAACGTG AGCAGAAGGT TCTCCATTTC      180
CCTCGGAGTT GACCCTGGAG TCAACTGTAG CAGAAGGTTT TCCGATTTC TTGGAGTCAA      240
CCCTGGAGTC AACTGTAGCA GAAGGTTCTC TGATTCCCTC AGAGTCAACC CTGGAGTCAA      300
CTGTAGCAGA AGGATCTGAT TCTGGTTTGG CCCTGAGGCT GGTGAATGGA GATGGCAGGT      360
GTCAGGGCCG AGTGGAGATC CTATACCGAG GCTCCTGGGG CACCGTGTGT GATGACAGCT      420
GGGACACCAA TGATGCCAAC GTGGTCTGTA GGCAGCTGGG TTGTGGCTGG GCCATGTCAG      480
CTCCAGGAAA TGCTTGTTT GGCCAGGGCT CAGGACCCAT TGCCCTGGAT GATGTGCGCT      540
GCTCAGGACA CGAATCCTAC CTGTGGAGCT GCCCCACAA TGGCTGGCTC TCCATAACT      600
GTGGCCATGG TGAAGATGCT GGTGTTATCT GCTCAGCTGC CCAGCCTCAG TCAACACTCA      660
GGCCAGAAAG TTGGCCTGTC AGGATATCAC CACCTGTACC CACTAGACTC GAG                                     713

```

(2) INFORMATION FOR SEQ ID NO:1357:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 925 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1357:

```
GAATTCGGCC AAAGAGGCCT AGAATAATGC ATATACTGCC ATGTCAGATT CCTACTTACC      60
CAGTTACTAC AGTCCCTCCA TTGGCTTCTC CTATTCTTTG GGTGAAGCTG CTTGGTCTAC      120
GGGGGGTGAC ACAGCCATGC CCTACTTAAC TTCTTATGGA CAGCTGAGCA ACGGAGAGCC      180
CCACTTCCTA CCAGATGCAA TGTTTGGGCA ACCAGGAGCC CTAGGTAGCA CTCATTCTCT      240
TGGTCAGCAT GGTTTAAATT TCTTTCCCAG TGGGATTGAC TTCTCAGCAT GGGGAAATAA      300
CAGTTCTCAG GGACAGTCTA CTCAGAGCTC TGGATATAGT AGCAATTATG CTTATGCACC      360
TAGCTCCTTA GGTGGAGCCA TGATTGATGG ACAGTCAGCT TTTGCCAATG AGACCCTCAA      420
TAAGGCTCCT GGCATGAATA CTATAGACCA AGGGATGGCA NCACTGAAGT TGGGTAGCAC      480
AGAAGTTGCA AGCAATGTTT CAAAAGTTGT AGGTTCTGCT GTTGGTAGCG GGTCCATTAC      540
TAGTAACATC GTGGCTTCCA ATAGTTTGCC TCCAGCCACC ATTGCTCCTC CAAAACCAGC      600
ATCTTGGGCT GATATTGCTA GCAAGCCTGC AAAACAGCAA CCTAACTGA AGACCAAGAA      660
TGGCATTGCA GGGTCAAGTC TTCCGCCACC CCCGATAAAG CATAACATGG ATATTGGAAC      720
TTGGGATAAC AAGGGTCCCG TTGCAAAAGC CCCCTCACAG GCTTTGGTTC AGAATATAGG      780
TCAGCCAACC CAGGGGTCTC CTCAGCCTGT AGGTCAGCAG GCTAACAATA GCCCACCAGT      840
GGCTCAGGCA TCAGTAGGGC AACAGACACA GCCATTGCCT CCACCTCCAC CACAGCCTGC      900
CCAGCTTTCA GTCCAGCAAC TCGAG                                         925
```

(2) INFORMATION FOR SEQ ID NO:1358:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 172 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1358:

```
GAATTCGCGG CCGCGTCGAC AAATAAACCC AGCAACTTCA TTCATTGGCC TTATGTTTAT      60
TGAGGGCCTG CTAGTGCTGG GCACTGTTCT AGGCCCTGGG AATTTATTAG TGAGCAAAAC      120
AGCAAAATCT CTGTCCTCAT GGAGCTCACA ATATAGTAGG GAACGACTCG AG              172
```

(2) INFORMATION FOR SEQ ID NO:1359:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 770 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1359:

```
GAATTCGGCC AAAGAGGCCT AAGTCAGTGA GGTGGAGTCC GTTTTGGAGG TCACGCGGCT      60
AGTAATTGGA GCCTGGTTTA GAACCAAGTC AGTCTCATT CAGAATCCAG AACCAGTGAT      120
TTGTAAGTGA TGCACTTGTC TCCAAAGGGA TCCAGCACTG GGTTTCTCA TTTTAAATGC      180
ATCCATTCTT TAAAGCCTCT GTTCACAGTC ACAAGGTGTA CTTTTTAAAG GAACACAGCA      240
CACAAATGTG ACCGCTAGTG GACAGCAGTG GCAGCCCACT TGGATGGCAG AGCCTGGCAT      300
```

```

GCCGACTGGG ACAGAAGCCC CAGCACACGG TGTGATGATG GCGTCTCCAG GCTGACCTCC 360
ATGGCCTCAG GAATCAAAGT CCTCGGTCTC TTTCACGCGG GGTTCAAGAA GAAAACTCGG 420
CTATCTTACA TCTCCTCTCC CCTGTTTATT TGAATAAGT GAAGTTCATG TGGCTTGAGC 480
CTCGTTTCCT GGGGAAATCA GCCTGGCTTA GGATTCCATT GTCTTCTGGG ACTGGGAAGA 540
TGTGGAAGGC TGACCTCAGC CCCAGCTGAA GGTCACCTTC CCAGACTCTG AGCTCGGCTG 600
CCTTCTGCAT CGCCACGGCT GGAGGGCCTG GCCCAGGCCG TGGCTGCATG CTGGCTTTCC 660
ACTGTCTCGG TGTCCCTGCT GCCTGTCACT AATGTGCCCC GCACCTTCTG GTGTCAATGC 720
CCCTCTTGTG TGTGATTCTT TTCCTGAGCT AGTCCATTTT CTACCTCGAG 770

```

(2) INFORMATION FOR SEQ ID NO:1360:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1360:

```

GAATTCGGCC AAAGAGGCCT ACTCAGTGA AACCTTTAAA CCCTAAAATC CAGGAAAAGA 60
AAATAAATAC ATTATCATGG ACCTGAGGGA TTTTACCTG TTGGCTGCTC TGATTGCCTG 120
TTTAAGGCTG GATTCCGCAA TAGCTCAAGA ACTTATTTAC ACTATTAGAG AGGAATTGCC 180
TGAAAATGTG CCCATAGGAA ACATACCAA GGATCTGAAC ATTTCTCACA TCAATGCTGC 240
CACAGGGACC AGCGCCAGCC TTGTCTACAG ACTGGTTTCT AAAGCTGGGG ATGCCCTTT 300
GGTGAAAGTA TCCAGCAGCA CTGGGGAAT TTTCACAACC TCCAACAGAA TAGACAGAGA 360
AAAACCTCTG GCTGGCGCCT CATATGCTGA GGAGAATGAG TGTTCCTTTG AACTTGAGGT 420
GGTGATCCTC CCAATGATT TCTTCAGGCT GATCAAATA AAAATAATTG TCAAGGATAC 480
CAATGATAAT GCCCCAATC TCGAG 505

```

(2) INFORMATION FOR SEQ ID NO:1361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1361:

```

GAATTCGGCC AAAGAGGCCT AAATTGTTC TCTCAAACC AGAAGACCTT AGGTACAGAT 60
GACCCCAAGG AGCTGGGACA GCAGGACAGA NAGGGGAAGG GACAGGTCCA TATATAGGTG 120
TGTCATTGCA GCCACTGCAA TGAACATAAC ATGCAAGAAA TGTACAGAAT GTGGTCCAGA 180
ATTGCCCCACT GGTGTCTGT GGCCTGGTGG ACCCCACAGA GGAAGTCCCC AGGCTTTCAC 240
TTTCCTTCCC CATGGATTGA GCAAGCTCCC AGGGCAGGAT GGGTGGCCAG GAGGGGCAGA 300
ACGCTGGCGG GGACGGGGAA GCCAAGTGCT CACAGGACCA TCCACCACAG CTGCAGCCAC 360
ACTGCAAGAC GGCGGGGATG GGACACACGG TCTAGTTCTT AGTTCTGCCT CCTACAGGCA 420
GCCCCTGCTG TCACTCCAGA ACTAATTCTC TGTGTGCCAC TCACTGCGCT GTGTGACACA 480
CAACAGATAC ACATACATAG ACACATACGT ACATCTCTC CCCCATCTC ACCCTCTCAC 540
CAGCCCTC GAG 553

```

(2) INFORMATION FOR SEQ ID NO:1362:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 855 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1362:

```

GAATTCGGCC AAAGAAGCCT AGTCAACTTG ATCCAAACCT GTTGGTGAAG CAGCAGACTC      60
CACCATCTCA GCAGCAGCCA CTCCATCAGC CAGCCATGAA GTCTTTCCTT GACAATGTCA      120
TGCCCCACAC TACACCTGAG CTGCAAAAAG GGCCATCACC AATAAATGCT TTCAGCAACT      180
TCCCTATAGG CTTGAACTCA AACTTGAATG TAAATATGGA TATGAACAGT ATTAAAGAGC      240
CACAGTCCAG ACTAAGGAAG TGGACGACAG TGGACAGCAT TTCTGTGAAC ACATCTTTGG      300
ATCAAAACTC CAGCAAAACAT GGTGCTATTT CAAGTGGTTT CAGGCTGGAA GAGTCTCCAT      360
TTGTNCCCTA TGACTTTATG AACAGCAGTA CTTACCAGC CAGTCTCCA GGTTC AATAG      420
GAGATGGCTG GCCACGTGCC AAATCGCCTA ACGGCTCTAG CAGTGTAAAT TGGCCACCAG      480
AATTTTCGTC CTGGTGAGCC ATGGAAGGT TATCCAAACA TTGACCCCTGA AACTGACCCCT      540
TACGTCACTC CTGGCAGTGT CATAACAAT CTTTCAATTA ATACTGTGCG GGAAGTTGAC      600
CACCTCAGGG ACAGGAACAG TGGGTCATCC TCATCCTTGA ACACCACGCT GCCTTCAACT      660
AGTGCCTGGT CATCCATTCG TGCCTCCAAC TACAACGTTT CCCTCAGCAG TACAGCACA      720
AGCACTTCAG CCAGAAATAG TGATTCCAAA TTGACATGGT CTCCTGGTTC AGTTACAAAC      780
ACCTCTCTGG CTCATGAGCT GTGGAAGGTC CCTTGCCAC CTA AAAACAT CACTGCTCCG      840
TCCCGCCACC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:1363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 646 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1363:

```

GAATTCGGCC AAAGAGGCCT ACAAAGTA CATAGTAAGA CTAAGATACC AAGTTGTATA      60
CTAATATTTT TCAGGCCCTG GGCCTCAAAT ATATATATTT ATATATAATA CTCCAGTGTG      120
AACAGCAATT CGATGAAATG TAAAATGTAT CTTTTTTTTT TTAATCACA CACAAGTATT      180
CATAACCACA GGGTTCACCA GAAATCTAAA GCAAGGAGAC ACTCACTCAT ATAGAAATGG      240
AGTTACTCTT CCACAGATCG TTCTGATCAA AGGTTTTTGA ACAGAAATGA ATTAATGATT      300
TTTTTGATA ATATCCAACA TGTCCACTAT CAAATACATT TAGTATGAAA AAACAGATGA      360
AGAAAAGGAA CATACTTAG GACAAAGTAT CTGGTTAAAA TGCTGTTCAT TTAATAAAG      420
CCCACTCTCC TTACTTTAGA GCTCCTTGGT GAAATGGAGG TGAGTTTGAT GGAGTGCAGT      480
TGATGACCAC TGA AAAACAC GAGCCCTTTC AACAATGTTG CAACACTGTT AGTTTTTGGT      540
TTAAACACAC ACACACACTC ACAAATGCTA AGTGTA CACT ACCAAATTCT GCGGTCAGCT      600
TTTCCAAGAA CTACTGGGGA AAGTTTCAAT GCTGCAAATC CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1364:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1364:

```

GAATTCGGCC TTCATGGCCT AATGGCTTAG CTGAAGGAAA TGCTCCAGAA ATTGGACTGT      60

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GTAAACCATC AGTACAATAA TACGCTGTGT ATGTATGTGT ATATAAAATG AGAATTATGG      120
CATAATTGGA GCATTTCAT TAATCAACAA ACTCACATTG AGACAAAAC TAGTTTTACA      180
GCTGTCTTGA TTAAAGCCAA GTGTTCCATG TTGCTGTGAA GAATAGCCTC TTTCAAATAC      240
TTTGGAAGT AGTTACTTGG AACTTGTAA AGGTATTACA TTTTATATT TAAACACCTA      300
TAGAGATCTT CAATTCCTTG AGTCTGAGCT TGTGGGTGGA ATTCTAAATT TGTATCATAA      360
TCTGTCTTTT GTGAAACATT TTGAAAATAT GTATATATAA TATTGTATAT GCAAATTGTG      420
TTGTTTCACT TGTAAGGGA AAAGGCTTAT TTTTCTTTAT ATTCTGATA ACTTGTTTTG      480
CATATGACCG GCACTTCTCG AG                                         502

```

(2) INFORMATION FOR SEQ ID NO:1365:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 197 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1365:

```

GAATTCGGCC TTCATGGCCT ACAGAAGTAC GGGAAGGCGA AGAAAAGAAT AGAGAAGATA      60
GGGAAATTAG AAGATAAAAA CATACTTTTA GAAGAAAAAA GATAAATTTA AACCTGAAAA      120
GTAGGAAGCA GAAGAAAAAA GACAAGCTAG GAAACAAAAA GCTAAGGGCA TCGATTGAAT      180
TCTAGACCTG CCTCGAG                                         197

```

(2) INFORMATION FOR SEQ ID NO:1366:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1366:

```

GAATTCGGCC TTCATGGCCT AGGCCTGGGG TGGGACATTT TGTTGTGAG AAGCCTGGAC      60
AAGAGGACGA GGTGCACACC ATGTCACTCA CGGATTGTG AACTCACAGG AGAGGGTTGG      120
ATAGGGCGTG TGAACGTGAG CCCGCGGTGT AGACGATGTG AAGCTGTGGT AACGGGTGGG      180
CTTGTGATGG CACCCGCTGC TCGCAGGAGA GGTTGGATA GGGCATGTGA ACGTGAGCCT      240
GCAATGTAGA CGATGCGAAG TCGTGGTAA CCGTGGGCTT GTGACGGCAC CCGCTGCTTG      300
CAGCCTAACT CGAG                                         314

```

(2) INFORMATION FOR SEQ ID NO:1367:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1367:

```

GAATTCGGCC TTCATGGCCT ACTGGTCCCA TTTTCTATT GCAGTGGTCA TCATTTTAT      60
TGATGTATAA TAATATTGTA TCATAAATCT TCATAATATG TGCTTCCAAA GTTTTTCTA      120

```

ATTTTTCAC T AACCTTTGAT TTGGTATTTA ATTTT TAGTT GTCAGAAGTT TTTAATATTT 180
 GTATCATCAA AGCTATCAGG TTATTAAAT TGA CTCTCA TTTAGACATA CTAGGCCAT 240
 GAAGGTCGAG 250

(2) INFORMATION FOR SEQ ID NO:1368:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1368:

GAATTCGGCC TTCATGGCCT AGTGAGAGCA CCACACAAAG GACAGGAAAA ACACCAGCAA 60
 TACATCAGCT TTACACAGCA GGCAAGTTTC CTGCTCTCTA CAAGTACAGA TGGAACTTGT 120
 CTTGTGAATT AACATCTGA CTACTTTTGT TGATCATCAC ATTTTTCCT CATGAGAGAA 180
 ATAATAGTGT TTTATAGGCT CCTGAGAATA GGT TACTAA AGTCATCGAG ATCTGGGTTT 240
 AAATGACACT TCATGCTCGA G 261

(2) INFORMATION FOR SEQ ID NO:1369:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1369:

GAATTCGGCC TTCATGGCCT AGTTTTTGTG TGTGTTTGTG TTTGTTTTTT GGCAAGAACA 60
 GTTAGGAACC AGATCACAGT GAGGTATAGA GTGAATGAGA GTTGAGAATG TAAAGACAAT 120
 GGATATAGAT CACTATTTC AAGAGCTGTT TGTGAGAGGG AGGAGAAAAA TAAACAGTT 180
 ACTGAGCAAT AGGGTGGTTG GTAAGGGGGA GGGATTTTT TCTGAAAGAT GGGAGAAATT 240
 TTAACATACT TAAATTTGAT GGGATAAGCC ATGCACTTAT AGGCATTGAG TCAATATATA 300
 TTTCACAAAT GAATGAAGAT AAATTAGGGA GAGGTTAATT GGAGATTTTA GGAGAGAGGG 360
 AATAATTGAT CATGTAAAGT CATTGATAAG GTGGGAGCAG AACTCGAG 408

(2) INFORMATION FOR SEQ ID NO:1370:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1370:

GAATTCGGCC TTCATGGCCT ACTCGATTAC AGGTCTCCCG CCTGCCATGC AGAAAGTCAT 60
 GTATAAGGGA CTCGTCCCGG AGGATAAAAC ATTGAGAGAA ATAAAGTGA CCAGTGGGGC 120
 CAAGATCATG GTGGTTGGCT CCACCATCAA TGATGTTTGA GCAGTAAACA CACCCAAAGA 180
 TGCTGCGCAG CAGGATGCAA AGGCCGAAGA GAACAAGAAG GAGCCTCTCT GCAGGCAGAA 240
 ACAACACAGG AAAGTGTTGG ATAAAGGAAA ACCTGAAGAT GTGATGCCAT CTGTAAAGG 300

GGCCCAGGAG CGCCTGCCAA CGGTACCGCT GTCCGGCATG TACAATAAAT CTGGAGGAAA 360
AGTCTCGAG 369

(2) INFORMATION FOR SEQ ID NO:1371:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1371:

GAATTCGGCC AAAGAGGCCT ATTTTTTTTT TTTTAACTG ATAGATGGTG CAGCATGTCT 60
ACATGGTGTG TTGTTGCTAA ACTTTATATA ATGTGTGGTT TCAATTCAGC TTGAAAAATA 120
ATCTCACTAC ATGTAGCAGT ACATTATATG TACATTATAT GTAATGTTAG TATTTCTGCT 180
TTGAATCCTT GATATTGCAA TGAATTCCT ACTTTATTAA ATGTATTGTA TATGCTAGTT 240
ATTGTGTGCG ATTTAACTT TTTTGTCTT CTCCCTNTTT TTGGTTGTGC GCTTCTCTT 300
ACAACAAGCC TCTAGAAACA GATAGTTTCT GAGAATTACT GAGCTATGTT TGAATGCAG 360
ATGTACTTAG GGAGTATGTA AAATAATCAT TTTAACAAAA GAAATAGATA TTTAAAAATT 420
AATACTAACT ATGGGATCTC GAG 443

(2) INFORMATION FOR SEQ ID NO:1372:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 770 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1372:

GAATTCGGCC AAAGAGGCCT ACTTCGGCT GGAGCTGCTG GGCGCGGGAC CTGGGGCGGT 60
TAATTTGGAG TGGCCCCTGG AGTCAGTTTC CTACACCATC CGAGGCCCCA CCCAGCACGA 120
GCTACAGCCT CCACCAGGAG GGCCTGGAAC CCTCAGCCTG CACTTCCTCA ACCCTCAGGA 180
AGCTCAGCGG TGGGCAGTCC TAGTCCGAGG TGCCACCGTG GAAGGACAGA ATGGCAGCAA 240
GAGCAACTCA CCACCAGCCT TGGGCCGAGA AGCATGCCCT GTCTCCCTGC CCAGTCCCCC 300
GGAAGCCTCC AACTCAAGG GCCCTCCACC TGAGGCAGAT CTTCTTAGGA GCCCTGGAAA 360
CTTGACGGAG AGAGAAGAGC TGGCAGGGAG CCTGGCCCCG GCTATTGCAG GTGGAGACGA 420
GAAGGGGGCA GCCCAAGTGG CAGCCGTCCT GGCCCAGCAT CGTGTGGCCC TGAGTGTTC 480
GCTTCAGGAG GCCTGCTTCC CACCTGGCCC CATCAGGCTG CAGGTCACAC TTGAAGACGC 540
TGCCTCTGCC GCATCCGCCG CGTCCTCTGC ACACGTTGCC CTGCAGGTCC ACCCCCCTG 600
CACTGTTGCA GCTCTCCAGG AGCAGGTGTT CTCAGAGCTC GGTTTCCCCG CAGCCGTGCA 660
ACGCTGGGTC ATCGGACGGT GCCTGTGTGT GCCTGAGCGC AGCCTTGCTT CTTACGGGGT 720
TCGGCAGGAT GGGGACCCTG CTTTCTCTA CTTGCTGTCA GCTCCTCGAG 770

(2) INFORMATION FOR SEQ ID NO:1373:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 597 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1373:

```

GAATTCGGCC AAAGAGGCCT AGTCTCTTG AAGATCTCTA GGAACCTGCT TTATGAATCT    60
TCATGCTCCT GTGTTGGATG CATATACATT TAGGATAGTT AGGTGTTCTT TTTGAATTGA    120
AACTTTTACC ATTATGTAAT GCCCTTGTTT GTCTTTTAAA ATTTTGTGTT GTTTAATATC    180
TGTTTTGTCT AAAATTAGAA TTTCAGCCTC TGCTTTTTTT CTGTTTCCA TTTGCTTAAT    240
AAATTTTCTC TCATTCCCTT ATTTTGTAGC TATGGGTGTC ATTGGATGTG AGATTCACTC    300
CTTGAACACT GTACTACTGG TTCTTGCTTT TTTACTCAGC TTGTCACTCT GTGTCTTTCA    360
ATTGGGCATT CAAGGCTAGT GTTGATATGT GTGAATTGTG TTCTGTCATC ATGTTATTAG    420
TTGTTTATTA TGCTGACTTG TTTGTGTGGT TTCNTTATAG TGTTACTGGT CTGTGCACTT    480
AAGTGTGTTT TTTTAGTAGC AATATTTTCT TTTTCATATG AGTGCTTTAT GCGAGGTATT    540
TTGCAAGGAT TTTCTGAATN NTCNGAATTT TTATGTGGGC TAAACTAGGG GCTCGAG    597

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(2) INFORMATION FOR SEQ ID NO:1374:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1374:

```

GAATTCGGCC AAAGAGGCCT AGCCTCCCAG TGTGAGCCAC CGCACCCAGC CTGGATTGTT    60
GAATTCATAG CTTGGGTCAC CTCCAGATTC ATTTTCACAG TCTTTCATGT TTTGGTCATA    120
TGACATTGTA TTTTGCTGCC ATATGACTGA TCTTTTTTTG TTAATGTGA GATACTTGTT    180
AAAAAATGTT TAGCAATGAA TTGAGGCCTA GTAGCATGTT ATCTTGCTGC AGAAGAGATG    240
GGAGTCTACT TCTGGGGGAT GGTCAAGGGT CCTCCATACA GGCTGCAATT GAAGTCGTCG    300
GTGCAGGCTC AGTCCCTACA AAGGCCAGGG TATTTCCTGT CCACCTTTAT TCTGATGCAT    360
GACTCTTCTG GGTCTCAACC AGAGCCAGTG GACTTCAGTA TGGGTCGCTT TCATTGGCAG    420
ACCTCAATC CACTTGTTTT CCATCTAATC CCACTCGAG    459

```

(2) INFORMATION FOR SEQ ID NO:1375:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1375:

```

GAATTCGGCC AAAGAGGCCT AATGGATCTC ATGTGCAAGA AAATGAAGCA CCTGTGGTTC    60
TTCTCTCTGC TGGTGGCGGC TCCCAGATGG GTCCTGTCCC AGCTGCAGCT GCGGGAGTCG    120
GGCCCAGGAC TGGTGAAGCC TTCGGAGACC CTGTCCCTCA CCTGCTCTGT CTCTGGTGCC    180
TCCATCAGCA GCAATAGTTA CTCCTGGGGC TGGATCCGCC AGCCCCCAGG GAAGGGGCTG    240
GAATGCATTG GGAGCATCTC TTACAGTGGG AGCACCTACC TCACCCCGTC CCTCAAGAGT    300
CGAGTCACCG TTTCCGTAGA CCGTCCAAG AACCAGTTAT CCCTGAGGCT GAGCTCTGTG    360
ACCGCCGAG ACACGGCTGT GTATTATTGT GCGGGGGGGT CTCGGGGGGA TTATTCCTAT    420
GAGAATAGTG ATTACCCGA CCCCCGTAC TATTAGACT CCTGGGGCCG GGAACCCCTG    480
GTCACCGTCT CTCAGCTTC CACCAAGGGC CCATCCGTCT TCCCCCTCGA G    531

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(2) INFORMATION FOR SEQ ID NO:1376:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 661 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1376:

```

GAATTCGGCC AAAGAGGCCT AATGACTCAG AAGAAAGAAG TTACTTTACC ATTTTGTGTT      60
ACACCATTTA AACTGCTTTC TGATTCCAAA CAGTTCAACA TTTTAAGAAA AGCAAGATCT      120
TATATAAAAC ACAGAAAGTT TGATGAAGTG GTCTCCCTTT GCAAGGAGCT AATTCATCTT      180
GCATTGAAAG GATTGTCCTA TTATCACACA TATGACAGAT TCTTTTGGG CGTCAATGTT      240
GTTATTGGTT TTGTGGGATG GATATCTTAT GCCTCTTTGT TGATCATCAA GTCTCATTCC      300
AACCTTATAA AAGGTGTTAG TAAAGAAGTG AAGAAACCAA GCCATCTCCT GCCTGTAGT      360
TTTGTAGCTA TTGGCATTTC AGTAGCATTT TTTCTGCTGA TTCAAGCCTG TCCCTGGACA      420
TATTATGTAT ATGGTTTGTT GCCACTGCCA ATATGGTATG CGGTTCTAAG AGAATTTCAA      480
GTTATTCAGG ACCTTGTTGT ATCAGTGTTG ACCTATCCTC TGAGCCATTT TGTGGGTAC      540
CTGTTAGCCT TTACCCTGGG AATTGAAAGTA TTAGTTCTCA GTTTTTTCTA CCGCTATATG      600
CTTACCGCTG GACTTACTGC CTTGTCAGCT TGGCCATTTC TCACTCGGCT GTGGACTCGA      660
G

```

(2) INFORMATION FOR SEQ ID NO:1377:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 117 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1377:

```

GAATTCGCGG CCGCGTCGAC AAAAAAGGTA AAGATGTTGC TGTATGCAA ATGGACCCAA      60
GTTATGTTTA TTCAAGTTGC CTGTAGAAAC TTAGTGCTCT ATAGCCACAA ACTCGAG      117

```

(2) INFORMATION FOR SEQ ID NO:1378:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 118 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1378:

```

GAATTCGCGG CCGCGTCGAC CTAAATTTA AACTGGCCT GGTTCCTT TTTTATCAAG      60
AGAGCTTAAC AGATAAAAAA TGAAATTAGT CTATTTTCTA CTTGCCAGCA GTCTCGAG      118

```

(2) INFORMATION FOR SEQ ID NO:1379:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 229 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1379:

GAATTCGCGG CCGCGTCGAC ATTTTATATA ATATTTTAAA TAAGTTTGTG TACAAAACAA	60
AGATTTGACT GCATTTTGAT TGTGACCCCG TTGCATGAAG TCAGGTGTGG AGTTTTCAC	120
TTGTGGTATC ATGTTGCTGC TGCTCAAGAA GTTCTGATT TTGGAACATT TTGGATTTTG	180
GATTTTCACA TTGGGGATAC CTAATGTGAG AGAGACTAGG CCACTCGAG	229

(2) INFORMATION FOR SEQ ID NO:1380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1380:

GAATTCGCGG CCGCGTCGAC GTTGGGGACA TGGTGGGTCT GAGAAAAGTG TTGCCCGCAA	60
CTTCTATCT GGCATTCCCT GCGGAGGAAA TAGAATGCGC GCTCTCCGAC AGCATTTCCT	120
GTAACATCCG CGAACTCGAG	140

(2) INFORMATION FOR SEQ ID NO:1381:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 99 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1381:

GAATTCGCGG CCGCGTCGAC TCTCAGAAGA GGTGTGTTA ACTTCTATAA ATACAACCAC	60
TTCATGCGTT GGCATCTCCT TGAGAAAAGG CTTCTCGAG	99

(2) INFORMATION FOR SEQ ID NO:1382:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1382:

GAATTCGGCC AAAGAGGCCT AGTTTAAGTG CTGTGGAGTA GTATATTCA CTGACTGGTT	60
GGAAATGACA GAGATGGACT GGCCCCCAGA TTCCTGCTGT GTTAGAGAAAT TCCCAGGATG	120
TTCCAAACAG GCCCACCAGG AAGATCTCAG TGACCTTTAT CAAGAGGGTT GTGGGAAGAA	180
AATGTATTCC TTTTGTAGAG GAACCAAACA ACTGCAGGTG CTGAGGTTTC TGGGAATCTC	240
CATTGGGGTG ACACAAATCC TGGCCATGAT TCTCACCATT ACTCTGCTCT GGGCTCTGTA	300
TTATGATAGA AGGGAGCCTG GGACAGACCA AATGATGTCC TTGAAGAATG ACAACTCTCA	360

GCACCTGTCA TGTCCCTCAG TAGAACTGTT GAAACCAAGC CTGTCAAGAA TCTTTGAACA 420
 CACATCCATG GCAAACCTCG AG 442

(2) INFORMATION FOR SEQ ID NO:1383:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1383:

GAATTCGGCC AAAGAGGCCT ATTCAGGTGT TTTCATTTGG TGATCAGGAC TGAACAGAGA 60
 GAACTCACCA TGGAGTTTGG GCTGAGCTGG CTTTCTCTTG TGGCTATTTT AAAAGGTGTC 120
 CAGTGTGAGG TGCAGCTGTT GGAGTCTGGG GGAGGTTTAA TACAGCCTGG GGGGTCCCTG 180
 AGGCTCTCTT GTGCAGCCTC CGGGTTCATC TTTAGCAACT ATGCCGTGAG TTGGGTCCGC 240
 CAGGCTCCAG GGAAGGGGCT GGAGTGGGTC TCAAGTATAA GTGACATTGG TGACACCAGA 300
 TACTACGGAG ACTCCGTGAG GGGCCGATTC ACCATCTCCA GAGACAATTC CAAGAACATG 360
 TTGTATTTGG ACATGAACAG CCTGAGAGCC GAGGATACGG CCGTGTATTA TTGTGCGGCA 420
 AGGGATTGGT ATCATACTCG TGGCTATTAC TGGTACTACT TTGACTTCTG GGGCCAGGGA 480
 TCCTTAGTCA GCGATCTCGA G 501

(2) INFORMATION FOR SEQ ID NO:1384:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 634 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1384:

GAATTCGGCC AAAGAGGCCT ACTTCAATAT TCTGTTACGG GTTTTTTTAG TCITTTTTTC 60
 TCTTTGCTTT CCTGTGTTGG AATTTTCTAT TTCTATATAC TCAAGTTCAG AGATTCTTTC 120
 CTTTTCCATA TCCTGTCTAC TAGTGAGCCC ATCCAAGGCA TTGTTTCAATT CTGTTACAGT 180
 GTTTTGATCT TTAGTATTTC TTTTTCATTC TTCATTACAC TTTCTCTCTG CTAACATTGC 240
 CCATAAGTGC TTATATGCTG TATACTTTAT CTGTTGATCA TATTTGTTTT AAATTCCTAA 300
 TCTGATAATT CAACATCTCT GACATGTCTG GTTCTGGTTC TGATACTTGT TGTCAAACCTG 360
 TGGTTTTTTT TCTTTTAGAG TGGCTTTTAA TTTTCTTTTT GTTTTTTGTT TTTTTTTTGG 420
 ATAGTTGGAC ATGACGTACT AGATAAAAGC AACTACTGTA AATAGACCTT TAGGAATGTG 480
 GTGGTAAGAT GTGAGAGGAA GAAAAGCATT CTGTAGTCCT GTTAGGTTTC AGTCTTTTAA 540
 CCCATTTATG CTTAGTGTTT TATTACTGGA ACGCTAGGCA TGTGGAAGTT ATTTATATCC 600
 TACTGCTAAA GGTTATCACC AAGCTGTACT CGAG 634

(2) INFORMATION FOR SEQ ID NO:1385:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 700 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1385:

GAATTCGGCC	AAAGAGGCCT	ACTCAAGTTC	AAGGAAAATG	AAGACAAAAA	GTGATATGAT	60
GGAAGAAAAC	ATAGATACAA	GTGCCCAAGC	AGTTGCTGAA	ACCAAGCAAG	AAGCAGTTGT	120
TGAAGAAGAC	TACAATGAAA	ATGCTAAAAA	TGGAGAAGCC	AAAATTACAG	AGGCACCAGC	180
TTCTGAAAAA	GAAATTGTGG	AAGTAAAAGA	AGAAAATATT	GAAGATGCCA	CAGAAAAGGG	240
AGGAGAAAAA	AAAGAAGCAG	TGGCAGCAGA	AGTAAAAAAT	GAAGAAGAAG	ATCAGAAAAG	300
AGATGAAGAA	GATCAAAACG	AAGAGAAAGG	GGAAGCTGGA	AAAGAAGACA	AAGATGAAAA	360
AGGGGAAGAA	GATGGAAAAG	AGGATAAAAA	TGGAAATGAG	AAAGGAGAAG	ATGCAAAAAG	420
GAAAGAAGAT	GGAAAAAAG	GTGAAGACGG	AAAAGGAAAT	GGAGAAGATG	GAAAAGAGAA	480
AGGAGAAGAT	GAAAAAGAGG	AAGAAGACAG	AAAAGAAACA	GGAGATGGAA	AAGAGAATGA	540
AGATGGAAAA	GAGAAGGGAG	ATAAAAAAGA	GGGGAAAGAT	GTAAAAGTCA	AAGAAGATGA	600
AAAAGAGAGA	GAAGATGGAA	AAGAAGATGA	AGGTGGAAAT	GAGGAAGAAG	CTGGAAGAAG	660
GAAAGAAGAT	TTAAAGAAG	AGGAAGAAGG	AAAGCTCGAG			700

(2) INFORMATION FOR SEQ ID NO:1386:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 127 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1386:

GAATTCGCGG	CCGCGTCGAC	CTTTAGTGTG	TCTTTTCATT	CTCTAAAAAG	TGTCCTTTGC	60
AGAGAAAAAA	AAAATTTTAA	TTTGTATGAA	ATCCAACCTA	TCAATTTTTC	TTCTGTGGCC	120
CCTCGAG						127

(2) INFORMATION FOR SEQ ID NO:1387:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 128 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1387:

GAATTCGCGG	CCGCGTCGAC	CTCTGTTTCT	TCGTTTTGCT	GAATATTTAT	TAGCATTCCA	60
TCACTTTGTG	TTTAATTAAT	AGAAGTTGAG	TTCAAACAAT	GTTTTTAAAA	TTACACACAA	120
TACTCGAG						128

(2) INFORMATION FOR SEQ ID NO:1388:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 816 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1388:

GAATTCGGCC	AAAGAGGCCT	AGTTTCTTTT	GCTCTACATC	TTCACCAGTA	TTTGGTGTTA	60
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TCAGTGTCT GAATTTTGTG CATTCTGATA GGTGTGTAGA GGTATCTTAT AATTTTAATT 120
TGTGTTTCTC TGATGCCATA TGATGTGTGG GACATCTTTT CATATGCTGA ATTGCCATCT 180
GTATATCTTT GGTGAGGTGT CTGTTAAGGT TGTGGCCAA TTTTAAATT GGGTTGTTTG 240
TTTTCTTGTG GAATTTTAAG AGTTCCTTAC ACTGTCTCTG TCTGTCTTGT CTGTCTGTCT 300
GTCTGTCTGT NGAGACAGAG CCTCGCTCTG TCACCCAGGT TGCAGTACAG TGGCACAGTC 360
TTGGCTCCCT GCAACCTCTG CCACCTGGGT TCAAGTGATT CTCCTGCGTC AGCCTCCCGA 420
GTAGCTGGGT TTATACCCGT GCACCACCAC ACCTGGCTAA TTTTGTATT TTTAGTAGAC 480
ACGGGGTTTC ACTANGTTAG CCAGGCTGGT CTCGACCTCC TGACCTCAGG TGATCCACCC 540
ACCTTGGCCT CCCAAAGTGC TGGGANGNGA GCCACCACAC CCAGCTCCT TACACATTTT 600
AGTTAATAGT TCTTTATCAG ATGTGTCTTA TGTAAATATT TCCTCCCTAT CTGTGGCTTG 660
TCTTTTCATA CTCTTGACAT TGTCTTTTGC AAAAGACAAC AATTTTAAAG AAACAAGTAG 720
ACAATTTTAA TGAAGTCTGG CTTATCAGTT CTTTCTTCA TGGTTGGTAC CTTTGGTGCC 780
GTATCTAAAA GTCATCACCA AACCAAGAA CTCGAG 816

```

(2) INFORMATION FOR SEQ ID NO:1389:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1389:

```

GAATTCGGG CCGCGTCGAC CTAAACCGTC GATTGAATTC TAGACGAACT ATATGTTTAA 60
GCAAAAACAA AAATAAAAT CCTCAAAAA AGTAATATCA GAGTTTAAAT TTCAACCAGC 120
TGGCACAACA ATGAAAGTGT CAGACTTCT GAAAGTACTC GAG 163

```

(2) INFORMATION FOR SEQ ID NO:1390:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1390:

```

GAATTCGGCC TTCATGGCCT AAAACCTCA AAAATAAATT AGAATCCAGC ACTGCTACAA 60
TATATTATCT AAAATGTCTA ATTCTCAAAA ATATGAGTGA TGCAAAGAAA CAGGAAACAG 120
TGAAACACAG AGGAAAAAAC AGTGACTAGA AACTGACTTA AGAGTAAGCC CAGATGTATT 180
TGGGAGCCAG AGCCTTCAA GTAGCTATTA AATATGTTG AAAAAATTAA GGGAAAATAT 240
GACAATGACT CAAAAATAAG GACTCTAAAT ATAGAAATGG GAGCTG 286

```

(2) INFORMATION FOR SEQ ID NO:1391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1391:

```

GAATTCGGCC TTCATGGCCT ACTTTTAAGG GCTTGAAGT TTCAAAACCA CAGTCTGCAT      60
GTGACAGGTG CTCACGTGCT TTGGGTTGGC CGCTGGTTCT AGGCCTCTGC TGGAGTGTGT      120
GATCTGCTTT CTGACGGCAG GCGGTTCA CA TGGGTGTGCT TTAATCTTAC GTCTCCGTCC      180
TCTTTTCCA CTGAGAGTGC TGGTCTCAAG GACAGTGGAG ATGAGAGAAT TGGAAATATCG      240
CATAATGTCT CATCTGTTTT ATCTCTTGCT ACAAACATCA CAATCTCAAA ATAACAATGG      300
CAGTACAACCT GCCACCTATA TCATTACTGA AAACAGTGAA GATATTTTTT GCCTAAGTCT      360
TCCCATCTG TGTAGTTATG CAGAGTCTCG AG                                     392

```

(2) INFORMATION FOR SEQ ID NO:1392:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1392:

```

GAATTCGGCC TTCATGGCCT AGTAATCTTT CCCCCAGTT TTTGGATGAA GAAACTAACA      60
CTGAAGGGGC GAGGTGGCCT CCCAGGCTCA GAGGGTGATT CAGAATCCAG GCCTGGTGTT      120
CCTTCCACAG TACCAAGCG CCACACATTA GTTGTCTTGT AGATTTTCCA CACTTCAGGG      180
AGAATGCCAA AGTATCTTTG CCTTGCAAC ACTACCTGTT CAACACTCAG TGACGAGGGT      240
GTCGTGTGTG CTCAGGCAAC TCCCGCCCTT CTTCCTTTTG CTCGAG                     286

```

(2) INFORMATION FOR SEQ ID NO:1393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1393:

```

GAATTCGGCC TTCATGGCCT ACTGAGTTCT CAAATCTAAC GTTTTAGGAA TTTTTTATTC      60
CTGCAGAGAG TTGGGGAGCT GTTTAAAAGT TGGTTGTTT AGCCAGTATA GCTAGATTCC      120
TCAAGGTCAA CACAACGCCA TACTGCTCTA GCTGGGGCTA GATTCTCAT GATAGTCTAA      180
ACTGTGTGAT GGCCAAGTCC CCACTTTGAA GATGTCCAAA TTCAGCCTCA GACATTCTC      240
CTCAAGAAAG GGGGGGCAAA AAAGCCTTTT GTGCCCTTT CCCAAATTAT TTGCTCATGT      300
CGCAAGACTG AGGTCTCGAG                                     320

```

(2) INFORMATION FOR SEQ ID NO:1394:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1394:

```

GAATTCGGCC TTCATGGCCT AACGCCATCT ACGACCTGAT CGAGCGCATC GAGGATTTGG      60
CGCTGCAGAA CCAGATCCGG GAGCACGTCA TCTCCATCGA GGACTCGTTT GTGAACAGCC      120

```

```

AGGAGTGGAC GCTGAGCCGC TCCGTACCGG AGCTTAAAGT GGGCATAGTG GGGAACTGT      180
CTAGCGGGAA GTCAGCCCTG GTGCACCGCT ATCTGACGGG GACCTATGTC CAGGAGGAGT      240
CCCCTGAAGG GGGGCGGTTT AAGAAGGAGA TTGTGGTGGA TGGCCAGAGT TACCTGCTGC      300
TGATCCGAGA TGAAGGAGGC CCCCTGAGC TCCAGTTTGC TGCCTGGGTG GATGCAGTGG      360
TGTTTGTGTT CAGCCTGGAG GATGAAATCA GTTTCAGAC GGTGTACAAC TACTTCCTGC      420
GTCTCTGCAG CTTCGCAAC ACCCCTCGAG      450

```

(2) INFORMATION FOR SEQ ID NO:1395:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1395:

```

GAATTCGGCC TTCATGGCCT ACCGTCATTG ATTGCAGGGA CCATCAAACC CCAGACAATC      60
CTATTTTGGT GGGAAATCTA GCAGATAGAG AAGCCAAACA AGTAGCCCTA CAACCTGTAC      120
AAGGCCAGTT TCTGTGCCTG TCCTCGTTCT CTCCTCTTTA CTCTCCAGAA GAAAAGGAGG      180
ACTACCAAGC CCAAACCTT CAAAAACAAG GACCATGGTA TGTCAAGGAA GGGTGCTTCC      240
TTCTTCTCA CTCTCAAACA ATCTCTATCC TTCGAG      276

```

(2) INFORMATION FOR SEQ ID NO:1396:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1396:

```

GAATTCGGCC TTCATGGCCT AGGGGGCGGG GGGCGGGGCG GGTCTCAGAA ATCAGGAGTA      60
ACTCTTTGAA AACTAAATAG TTAAAAATCT CATCCAACCT CCACCTAACT TACATGCCTG      120
GTAAACCGAC ACTCTGTATA TCCTGTATAA AACATTCTAA CTGATGCCCA CGACATACTA      180
TTGGCTGATG GTTTTGCTAG TATACAGTAT GGCCACTTAC TGCCATTCCC ATGCCCTCGA      240
G      241

```

(2) INFORMATION FOR SEQ ID NO:1397:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1397:

```

GAATTCGGCC TTCATGGCCT AGAAAATGAA GAAGAAGATC ATCAAGGACC AGAAACTGCT      60
TGTGATCGTG GGGGGCATGC TGCTGATCGA CCTGTGTATC CTGATCTGCT GGCAGGCTGT      120
GGACCCCTG CGAAGGACAG TGGAGAAGTA CAGCATGGAG CCGGACCCAG CAGGACGGGA      180
TATCTCCATC CGCCCTCTCC TGGAGCACTG TGAGAACACC CATATGACCA TCTGGCTTGG      240

```

CATCGTCTAT GCCTACAAGG GACTTCTCAT GTTGTTCGGT TGTTCCTTAG CTTGGGAGAC 300
CCGCAACTCT CGAG 314

(2) INFORMATION FOR SEQ ID NO:1398:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1398:

GAATTCGGCC TTCATGGCCT AGTGCACACC AAGAACCAAG TTTCAGCTTG GTTACTGTGT 60
TGAAGACACC TTTGCTATAT TTCAAGTCAT TCCTTCTTTT CTCAATTTT TTTAATTGAC 120
AAAAATTTTA TATATCGTGT ACAACATCAA TCCATCTTGG CATCTGTATT TGTGAGGGTT 180
GTCTTAGAGG GACAGAACTA ATAGGATATA TATAAGGGGG AGTTTATTAA GTATTAAGTT 240
ATATAATCAC AGGGTCCAC AACAGGCTGT CTGCAAGTTG AAGAGCAAGG AGAGCCAGTC 300
AGAGTGCCGA AACTGAAGAA CCTGGAGTCC GATGTTCTCG AG 342

(2) INFORMATION FOR SEQ ID NO:1399:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 614 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1399:

GAATTCGGCC TTCATGGCCT AGGGCCATGT TGGTTAGAAT GGTGCCATAT TTTCTGGGAT 60
AGCACCATGC TGGCTGGGAT GGTGCCATGT TGGCTGGGAT GGCACCTGCC TCAGCCTCCC 120
AAATAGCTGG GATTACAGGC ATCTGCCACC ATGCCTGGCT AATCTTTTGC ATTTTATAGTA 180
GAGAAGGGGT TTCGTCATGT TGTGAGGCTG GTCTCTCACT CCTGAAGTCA GGTGATCCGC 240
CTGCCTCGGC CGCCCAAAGT GCTGGAATTA CAGGCATGAG CCGCCACGCC TGGCCTTTTA 300
CTTGAGTTT AATAGGATCG CTCTTGCTGC TATTGAGGAT AGTACATATG GGGTAATGAT 360
GCAAGCAGAG ACCTACTGTA GTACTCTTCA GGAGAGAATG GTGGCTTGCA CAAGGATGGA 420
AGCAATGAAG GTGGTGAAAA GTGGTCAGTT TCTATATTTA TTAGGAAACA CCTAGGATGA 480
TATCTTAATA GACCAAAATG TGAAATGTAA GAAAAATAGA GATGTCAAGA TGACACAAAG 540
ATTTTGGCT TTGACAACTG AAAGAATAGT TACTATCAAC TGTGATTGGT AACATGCAC 600
ATGGATCTCT CGAG 614

(2) INFORMATION FOR SEQ ID NO:1400:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1400:

GAATTCGGCC TTCATGGCCT AGTTCTATTT AAAAAATAAA CAACTAGACA ATTAAGTAGT 60

```

TTATTAACCT ATCACAATTG AATTTTTTTT TAATTTTCAG TCTTAACACA TTTTAAAAA    120
TGTATTAAAG TAATACATTG TAGTAGTAGG ATTATATACT CCTTGGCTGA GAATCCAAG    180
TACTGTGGTT CTACTGTTTA GTGAAAACCT CTGGAAGTTA AAATATAGAA TATGAAACCT    240
CGAG                                         244

```

(2) INFORMATION FOR SEQ ID NO:1401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1401:

```

GAATTCGGCC TTCATGGCCT AAAACAAACA AAAAATTATC TGAATGATCC TGTCTCTAAA    60
AAGAAGCCAC AGAAATGTTT AAAAÀCTTCA TCGACTTAGC CTGAGTCATA ACGGTTAAGA    120
AAGCACTTAA ACAGAAGCAG AGGCTAATTC AGTGTACAT GAGGAAGTAG CTGTCAGATG    180
TCACATAATT ACTTTCGTAA TAGCTCAGAT TAGAATGGCT ACCCCATTCT CTAGACAAAA    240
TCAAATTGTC CTATTGTGAC TCTTCTAAAA ATGAAGATGA AGAGCTATTT AATGACACAC    300
CTTGATTAA AACGGGAAAC TCGAG                                         325

```

(2) INFORMATION FOR SEQ ID NO:1402:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1402:

```

GAATTCGGCC TTCATGGCCT AAAAGAAAAG AGAAAGTGTT ATTTTCCTGT TAGTGACATG    60
TAGTCCCTTT GTTCTAGTAG GAAAAAAGGT GCCTAGAGGT AGTATATAGA GTAAATATTG    120
TTCCTTTAGC CTACTTCCTG CAGCTTCCAA TTTATCCAAG GAAATGTCTA CAACAATTTT    180
GTTCAAAAGT CTGTTCTAGT CAATAGCAGG AGAAGTCCAC GTTATTGGGC TGATTTTGCT    240
TACATCAGCA AGAGAAATGT CACGTGATAC TCAGGCCGCG CTTTCTCTTC CATCACACCA    300
TCTTCAAGGA ATGTCAATAA ACCCACTTTG GCTAGGCAGG ATTGAATTCT AGACCTGCCT    360
CGAG                                         364

```

(2) INFORMATION FOR SEQ ID NO:1403:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1403:

```

GAATTCGGCC TTCATGGCCT AGTTAGGGAC TAACATTGTG ATCAACAGTT GATAAATGTC    60
TAAGATTGTT TATTATACAG CAGGGTACAA TGGTAGTGCT AATGCCAACA GGCACCATG    120
GAAGTTAGTC TAAAAATTAT CGTAGGCTT TATACAAGCA ACAACATATG CTGCTGCTCT    180

```

TAGAATTTTG GGAAATGATC TGCTTCTAAT ACTAAGCAGT TCTTTAACAT TTTTAAATAT 240
TGAATTCTAG ACCTGCCTCG AG 262

(2) INFORMATION FOR SEQ ID NO:1404:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1404:

GAATTCGGCC TTCATGGCCT AGCAATTGTC TTCAGTTTCC TTATGTTTGC CTTTCTCATC 60
TGTCCTCTTT TCCATTTTAT TCCTACTCTG TCTCAGTCCA CTTACAGTTA TATTCCTAT 120
CTGTGTATTT TATAATATT GTGCTTTAAT ACTTTTAAAA TATCCTTTAT TTTACTGTTT 180
CTTCTCTTCC CTTGTCATAT TTAAAGTGT TTTATTTCTC AGCCTTCTAT ATCTTTGCAT 240
TAATTCTGTT CCTCTACAAT AGAGTCCGTT CCAAGCTTTC TGTCTTCCTG TGTCCCTCCA 300
CGGCTCTGGC TCTCTCTGCA TTATTTCTTA TTTATGGAAT ACAAATCTTT TACCCTTGTA 360
TTTTTCTCAC TCCTCTCCAC ACACCCCGA CTCGAG 396

(2) INFORMATION FOR SEQ ID NO:1405:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1405:

GAATTCGGCC TTCATGGCCT AGACCAAAAT GTCTGCCAG ATAAAGGATA CATTGTGCAT 60
ACATACACTG GGGAGAGGCA GACAAAAA CAATGTAGTT TGAGTGTGTG TGCGTGCCTG 120
CATGCGTGCA TGCAGGCATG TGCATATATA ATGCTAAAAC ATGATAAGTA CTATTAAAAA 180
AACAGGTTAG GGTGATTGAA ACTACTAGGG TATGAATAAG AGTGGGTTGC AATTTAAAGT 240
AGGGTCATTG TGGTTGGCCT TATTGAGGTG ACATTGGAGT CAAGACTTGG AAGAAGAAAG 300
GTTGTTGGCC ACACAGCTAT TGAGGGAAAA ATGTTCCAGA TAGAAGAAAC AGTCAGGGCA 360
ATGCCTTGGG ATGGAATCAT GCATAGAGTA TTCACAGAAT AGCAAGGAAG CTCTAGTTCT 420
AAAGTAAAGT GACTGAGACT CGAG 444

(2) INFORMATION FOR SEQ ID NO:1406:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1406:

GAATTCGGCC TTCATGGCCT ACCTAGAAGG TAGTAATGAT AAGCATTTAA TTAGAAGTAG 60
GCCTGAAGTT TGCAGTGCAA TGCAAGTAAGT ATTTACCGAG TGATTCTAT GAGTAAGGAT 120
GTGATAGCTG CTATAAGAGC TGCAAGTTT ATTAAGATAC ATCCCTGTCC TGAAACACT 180

GCCAGCTTCG ATGAGAATAC AACAAATGTTA GATATATTCG TTTTGAAGA TACCTTTCCC	240
CCAGTTATTT TCATTTTACA GCTTCTCCAG CCTCCTTCAG CTTCTGTTCT CCCTCTTTGC	300
TTTTCTGTCT CAATTTTCCT GCCAGCCCT AAATTCACAG AGTAAATCCA CCAGAACCTC	360
GAG	363

(2) INFORMATION FOR SEQ ID NO:1407:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1407:

GAATTCGGCC TTCATGGCCT AGGCTTCAGG GATAACCACG TTCAGGTGGG TTAGACACAC	60
CTCCTGTGGG AGGGTGATTG CAATTAGCTA TCATAAGGCA GGAGACACAA CAGCAACTTA	120
AATTATCCAC AAGCAGAATC ATGAGCTGTT TGCAAAGGGA GTTTCATCG CAAGACAGTT	180
TCACTGTATT TAAGCGAGAT CTGCCCTCG TACACGATCA CCGCTCGAG	229

(2) INFORMATION FOR SEQ ID NO:1408:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1408:

GAATTCGGCC TTCATGGCCT AGGCTTCTAG AACAAAGATG TAGGCAGGCT CCCAAATGGA	60
GAGGTAAACA TGACCGCGTT GTTTGAAACT ACTTCATTAA TTTGTAAATC AGAACCAAAA	120
AGCTCTGGCC CTCCCACTTC TCCTAGCTGA CCTCCTCCC CACTTACGGA TAAACAGACT	180
TTAACTTCCC TAACCCAGAA ACACCTCCAC CAAAAATGTA TGGTTATACC TTATCCTAAA	240
AAGGCACCAT GCAGGCATT TAACTGAAC CAGTGAATC TAAATATGTA GTAGTAGAAA	300
ATATCACTAA TCAAACTTC CAGCATCAGA TGGTACAAAA CCCCAGAGG ACTGGTGACA	360
TGTACCCCGG GATGGCAACC CCAGCTTCTG GCAACCCAC AGCCCAGCGG GAGCTTCAGC	420
TCTGGTCAGG TGCACGGCTG CCAAAGTCTG CACACCTTGG GGACAAGGAA AGGAGACACT	480
TGCTTCATTG TGCTATTCAT GACCCAGTCG AG	512

(2) INFORMATION FOR SEQ ID NO:1409:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1409:

GAATTCGGCC TTCATGGCCT AATGGATTAT ATTTCTATAA CAGTTAGAGT ACTATTCAT	60
TTATCTCTTT CATTTTGAGT AAAGTTTGGT AGTTTAGGGA GGAATTGATC AATTTCATCT	120
AAATTGAAAG ATTCAGGTAC ATAAAGTTGT TGTTATATTA CTTATTATTC TTTTAATGTC	180

TGTGGGGTCT AGTGATGTCT CCTCTTTCAG TTCTGATATT GGTAAATTTGT GTCTTCTCTC 240
TTTTGTGCC AGCATGCTCG AG 262

(2) INFORMATION FOR SEQ ID NO:1410:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1410:

GAATTCGGCC TTCATGGCCT AGGGAGGTGG TTTCTCTATC ATTGCATGAG GTAAGAGTCT 60
GGCCCTGGAT GCTAAGGCTG CAGTTTCTA CAGAAAGGAG TCATCTCTGT GAGGCAGCAT 120
CAGCCTCCAA GACACAGTGI GCTGACCTGG TTTGTATAA AGATGAAAAC AGCTGTTCTC 180
AACTGGCTGA GGCCGGCCAC AGAGAGAGCG GCGGGCTCAG CCTTCACAGG ATTGTCCTTC 240
CACTAAAGGG TAGGGGGTTT TAATCATCGC AGAAAGGAAG TGGGGGTGAA GGTCAAGGAAA 300
AATAGAAGCA CGAATTCACC CCTCAGGCTC CAGCTAGAGG AAGCTAAGAG AAGAAATGAG 360
ATTGCATAAC TGTTAAGAAA AAGGCAAAGC TGGAGAGAAT GCAGAGGATT CTGGTTCCTG 420
GAGAGAACCT TCAGACTCGA G 441

(2) INFORMATION FOR SEQ ID NO:1411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 479 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1411:

GAATTCGGCC TTCATGGCCT AATTCATTGT CTGGTCCTTT ACAAAGACA TATGCTGGCT 60
CCTGCTCTCT GTGGATGATA GGTCTACAAA GATGTGATT CAACTCATATA TGTCTCCAAA 120
TTTATATATT AATTCATATA CTGTTTGTG TTACATTAAT CTAGCATTGT CTTTGGCTT 180
GCTACTGCAG TAAGTTACCT TCTAATTCAT CATTAGGTCA ACTTTATCAA CTCACCTAAG 240
TCCAAAAGTA AATGTAGGTT TCTCCTGGGT TCTTTTGCC CTTAAGTTT GCCATCCCCA 300
AATAAGCACA ACAGAGACCT GCACCAAGAG ACCTTACTTT TAGACTGTAA GCACCAAAGT 360
GATTTCTGTA GAGAGAGTGA GCCAGGCTCA GTCTTATGAC TGGCAATACA AGTTGAGGGT 420
AGGAGCTTTG GACAGAACAC TAGCTATGTA TAGTGTGTG TAGGTGAGTG CTTCTCGAG 479

(2) INFORMATION FOR SEQ ID NO:1412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1412:

GAATTCGGCC TTCATGGCCT AGCCGATTTA TAAATATGTA TATATAACCT TTCCCTTTT 60
GAGAGATCTC TTAGTAATAG TCAAAGCCAT ACCCTATTCC TTAGTGAGAA AGCCAGTTTG 120

(2) INFORMATION FOR SEO ID NO: 1413:

(A) LENGTH: 439 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEO ID NO:1413:

(2) INFORMATION FOR SEO ID NO:1414:

(A) LENGTH: 243 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEO ID NO:1414:

(2) INFORMATION FOR SEQ ID NO:1415:

(A) LENGTH: 276 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEO ID NO:1415:

```

GAATTCGGCC TTCATGGCCT AGTCTTCCAA GACAGGAATC AGCAACCTTT TTTTGTTTTT    60
CTGTATCAGT AATTCATTCT GTATATTTTA AAAAGTTTAA ACCTCTTCTT CCTAGCCCTC    120
CAGTATTTGT TTATAAATTA AAACGTTTCC CAAAGTGTTT TCTGTGAAAC AATAGTTCTA    180
AAAGGTGCTC TAAGAAAAGC TAAGTACATG GCAAAATCCA AAGTATATGT TTTATTTCAT    240
ACATTGATG AATTTTTTTT GTTTTTTCTT CTCGAG                                276

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(2) INFORMATION FOR SEQ ID NO:1416:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1416:

```

GAATTCGGCC TTCATGGCCT AGAGAGCAGG TTTTAGCTTG CATCCAGCTG TTTCTTGAGT    60
GATGTGTACA GCTTACCCCC AAAGAGGCCAA CTGAATTTCA GCTGCTCTAA TACCCACACC    120
CTCAACTTAG GTTTAGTCAT AATAAAAAAC AGAATGGATT TGTTAGTTCC ATTGATTGCC    180
ACAAACCTCA CCTTCTGTGT GGCAGAGATG TGCTTTAGTT CTTTCATTGGA ATGTTACTTT    240
CAGATCTCAC AAACCTCAAA CCTAGGGCAC CACCAATGAC AAAGAGAATG CTAAATAGAT    300
AAATCCTTTG CCAGGTCTTC AAGCTTTCCA CTCCCCTCGA G                                341

```

(2) INFORMATION FOR SEQ ID NO:1417:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1417:

```

GAATTCGGCC AAAGAGGCCT AGCCATTATT ATTAAAAAGT AGGATTGCTA CCCGCCATTA    60
CTATTAAAAA GTAGGATTGC TACCGCCAT TATTATTAAA AAGTAGGATT GGTACCGGCC    120
ATTATTATTA AAAAGTAGGA TTGCTACCCA ACATTATTAT TAAAAAGTAG GATTGCTACC    180
CTCCATTATT ATTAAAAAGT AGGATTGCTA CCCTCCATTA TTATTAAAAA GTAGGATTGC    240
TACCTGCCAT TATTATTAAA AAGTAGGATT GCTACCTGCC ATTATTATTA AAAAGTAGGA    300
TTGCTACCTG CCATTATTAT TAAAAAGTAG GATTGCTACC CGCCATTATT ATTAAAAAGT    360
AGGATTGCTA CCCGCCATTA TTATTAAAAA GTAGGACTGC TACCGCCCGT TATTTGCACA    420
GCTACCTTAT GAAAGTAGTT TCACGCTGTC TCGAG                                455

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(2) INFORMATION FOR SEQ ID NO:1418:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 573 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1418:

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GAATACCTAG CTTCCATGAT TTATGATAGA TATCCTTTAT TGGACCAATT CGTGTCTGTA    60

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ACCAGCCTCC TGTTCCTACT GCCATCCCCT CCTCATGCAC AGATGCCTCC TCCCTTGGCT 120
CCTGCTCTGA TCCCTGTACC CAGCTTGTCC CTGCAAGCA TGTTCCTCC CTTGCCCCAG 180
GCTCTGACAC CCCACACATG TGTGGATCCC CTCCCCTGTC CCAGCTCTGA TACCCCTTGC 240
ATGTGTGGCT GCCCCTCACC TGGGTGTCCT CTTCCTGTG CAGCTCTGA CAÇCCACGCA 300
TGTGGGGCTG CCCCGTGCCT AGGTGTCCCC TCCTCTGCTC AGGCTCTGTC CTCCTGCGGT 360
TGGCTTTCCC ATTCTGGATG CACCTCACAC ACAGCCTTGT CATCTTTGGA TGAATTTGGC 420
CTCCCCCATC CACTGCTGGT GCAGATGCTT CCTTACGGGG CCTTGTCTGA TGGCTTTAGG 480
GCTGAATCAT GCAGGAAGGA AGGAGAAGGA CAAGAAGAAA AGGGAAGGCT GGGGAAGGAA 540
GCGGGTGGTA AAATGGTTC ACAAGCCCTC GAG 573

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(2) INFORMATION FOR SEQ ID NO:1419:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 188 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1419:

```

GAATTCGGCC AAAGAGGCCT ATTTTAAAAA AAACATTTA ATTTTTTAAT TTATTTTGG 60
TTGTTTTTTG CACAATGAAG TTTCAGCTTC TCAACCTTCT CCCCTACCCA GGGCTGTGGA 120
CCCAGACTGG CCTTGAGCCA CAGTCCCTCT TTCCCTCCTC ACCCTCTTCC CCCTCCGGGC 180
ACCTCGAG 188

```

(2) INFORMATION FOR SEQ ID NO:1420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1420:

```

GAATTCGGCC AAAGAGGCCT ACGAGGAAAG ATCTAATTAT CATGGACCTG CGACAGTTTC 60
TTATGTGCCT GTCCCTGTGC ACAGCCTTTG CCTTGAGCAA ACCCACAGAA AAGAAGGACC 120
GTGTACATCA TGAGCCTCAG CTCAGTGACA AGGTTCAAA TGATGCTCAG AGTTTTGATT 180
ATGACCATGA TGCCTTCTTG GGTGCTGAAG AAGCAAAGAC CTTTGATCAG CTGACACCAG 240
AAGAGAGCAA GGAAAGGCTT GGAAAGATTG TAAGTAAAT AGATGGCGAC AAGGACGGGT 300
TTGTCACTGT GGATGAGCTC AAAGACTGGA TTAAATTGTC ACAAAGCGC TGGATTACG 360
AGGATGTAGA GCGACAGTGG AAGGGGCATG ACCTCAATGA GGACGGCCTC GTTTCCTGGG 420
AGGAGTATAA AAATGCCACC TACGGCTACG TTTAGATGA TCCAGATCCT GATGATGGAT 480
TTAACTATAA ACAGATGATG GTTAGAGATG AGCGGAGGTT TAAATGGCA GACAAGGATG 540
GAGACCTCAT TGCCACCAAG GAGGTCTCG AG 572

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(2) INFORMATION FOR SEQ ID NO:1421:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 498 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1421:

GCAAGACGGC	TACTGAGGCA	GGAGAATCGC	TTGAACCCAG	GAAGCGGAGG	TTGCAATGTG	60
CCAAGATCGT	GCCACTGCAC	ACTCTAGCCT	GGGCAACAGA	GCAAGACTGT	GTCTCAAAAA	120
AAAAAAATCT	TNGACNAAC	ATAGTTGTTN	ACATACTTCT	TTAATCCCAG	AGTTAGTTTT	180
AAAAANNACA	TGATTGCTGT	TTTTGCATAT	TATCTCAGCG	GTCTAAAAAT	AACCTAGCCA	240
TGTGCAGGAA	TGGGTAAAGT	CCCCTTAAAC	AAAAATGGGG	TTAGTTANGT	TAGTTCTTTT	300
GCCATTTTAC	TGGTCATATA	CCTGAAGCGC	TTAGCCTGAC	ACAATTGAAC	GCCAGACGGA	360
AGCCGNGATC	AGCGGTCCTG	ACGGGGGTCA	GAGTCAGACC	AGGGGTCTTT	TACCCAAGTG	420
GGGAAGATTG	GGAAAGGCCT	AGGATCAGAG	AGGGAAATGG	GTCCCTGGTT	GCCCATGGAC	480
CTAATGGGGT	CTCTCGAG					498

(2) INFORMATION FOR SEQ ID NO:1422:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 827 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1422:

GAATTCGCGG	CCGCGTCGAC	GAGGAAACCA	GCCAAGGACT	AACTACGACC	ATGAGATTGG	60
CAGTGATTTG	CTTTTGCCTG	TTTGGCATTG	CCTCCTCCCT	CCCGGTGAAA	GTGACTGATT	120
CTGGCAGCTC	AGAGGAGAAG	CTTTACAGCC	TGCACCCAGA	TCCTATAGCC	ACATGGCTGG	180
TGCCTGACCC	ATCTCAGAAG	CAGAACTCTC	TTGCGCCACA	GAATGCTGTG	TCCTCTGAAG	240
AAAAGGATGA	CTTTAAGCAA	GAAACTCTTC	CAAGCAATTC	CAATGAAAGC	CATGACCACA	300
TGGACGACGA	TGATGACGAT	GATGATGACG	ATGGAGACCA	TGCAGAGAGC	GAGGATTCTG	360
TGGACTCGGA	TGAATCTGAC	GAATCTCACC	ATTCCGATGA	GTCTGATGAG	ACCGTCACTG	420
CTAGTACACA	AGCAGACACT	TTCCTCCAA	TCGTCCCTAC	AGTCGATGTC	CCCAACGGCC	480
GAGGTGATAG	CTTGGCTTAT	GGACTGAGGT	CAAAGTCTAG	GAGTTTCCAG	GTTCCTGATG	540
AACAGTATCC	TGATGCCACA	GATGAGGACC	TCACCTCTCA	CATGAAGAGC	GGTGAGTCTA	600
AGGAGTCCCT	CGATGTCATC	CCTGTTGCC	AGCTTCTGAG	CATGCCCTCT	GATCAGGACA	660
ACAACGGAAG	GGGCAGCCAT	GAGTCAAGTC	AGCTGGATGA	ACCAAGTCTG	GAAACACACA	720
GACTTGAGCA	TTCCAAAGAG	AGCCAGGAGA	GTGCCGATCA	GTCCGATGTG	ATCGATAGTC	780
AAGCAAGTTC	CAAAGCCAGC	CTGGAACATC	AGAGCCACGG	CCTCGAG		827

(2) INFORMATION FOR SEQ ID NO:1423:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1423:

GAATTCGCGG	CCGCGTCGAC	GGGAGAGGAA	GGTTTGGGCA	GGATGGAATA	TTAAATTGTA	60
ACATGATAAA	CATGCAAGAC	TGTTATCCAA	TCTAGATAAT	TTATATACAT	TTTGATGACT	120
TAGGAAAACA	AAGCAATCAT	TTGTGACAAG	CCTAAAAAGC	TTGACATATT	TAACATACTT	180
AGGAACTTTT	TTTGTGCGGT	GGGAATTCTC	TAATTGTATC	ATGTGGGCCT	TTTGAAAGTA	240
ACAAACAGAA	GGCCAGTCTG	TTGCAAGTTT	GCTGCTGAAC	ATCACATTCC	ACCCTAAGAA	300
AACACAAGGT	GGATTGCATC	GAGGGTGGAT	ACCTTACCTT	AGCACAGA		348

(2) INFORMATION FOR SEQ ID NO:1424:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 152 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1424:

GAATTCGCGG CCGCGTCGAC TTGGAGAATG TGGCCTCTGA TCACTAACCA GGGTTTCTC	60
TTTACACTGG CTTGTTTACT TATTTCTTCA CCAAAGCCAG GGAACGTCCC TTAGCTACT	120
GCAGCATTTT TAACAGATGC GACAAATCAC AG	152

(2) INFORMATION FOR SEQ ID NO:1425:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 206 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1425:

GAATTCGCGG CCGCGTCGAC CTAAACCGTC GATTGAATTA GACCTGCCTC GAGATGCGCC	60
ACTTTCTGCT CACCCACCTT AGAGCCTTTG CATATGCAGT TGCTTCCTCA GAGTATTGCC	120
ATCCCCAGCA CGACCCCCAG CTCATTCTTC AGGCCACTAA CGTAAATGTT ACTTTCTCAA	180
AAACACCCCTC TCCATCCCGG CACCCA	206

(2) INFORMATION FOR SEQ ID NO:1426:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 353 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1426:

GAATTCGCGG CCGCGTCGAC GTGGGTACTT CATCCTCCTC ATCACTGGTT GGCAGTGAGA	60
GCTTCTTAAG ACGCTCCATG AGCTCTTTCT CTTCTCCATC ATCATCCACA TCCTTCTTCC	120
GCCTGCCTTT TCGGGTATCT CGCTTTTTTT TTTGCTGCTG TTGCTGTTGC TGCTGCTGCT	180
GCTCCTTCTC CTTGAGCACT TTCTCTTCTT CCCCAGCCTG TTTATCTTCT ACTGCCAGCT	240
CTTCAAAGAA CGTTTTTTTG ATCTTCTNGT CCTTCTTCCC TTTCTTCACC ACTTTGTCTG	300
ATGGGCTCGT GCTCTCTCCG TCCCCGATCC ACTCGGGCTC CGGCGGACTC GAG	353

(2) INFORMATION FOR SEQ ID NO:1427:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 343 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1427:

GAATTCGCGG	CCGCGTCGAC	AGATATTTGG	TTATCTTGAC	TTTTTAAAT	AACATATTTT	60
TACAGGATT	TGAGTCTGAG	AAGAGAAAGG	TAATATGCAA	GACACTTCGA	TTTGTGCAC	120
ATTATTATGG	AGCATCATT	ATGGTTTGTA	CATTCTTGT	CCTTTGGGCT	TGAATGGACA	180
GTACCAAAT	TGGGGAAATC	AGCAACTTGA	TGCACAGCTA	CGAGGAATAA	ATGCTTTTGC	240
TAATGCACAT	GGTCCCGTTG	CTTTCCCACT	GCTGAAGACC	TCTCCTTACA	GAGTGTTTGA	300
TAATGCATCT	GTTGAACATG	CACTGCTAGA	TGCTCCTCTC	GAG		343

(2) INFORMATION FOR SEQ ID NO:1428:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1428:

GAATTCGCGG	CCGCGTCGAC	GAGGGGAAGA	TGTCACGCAA	GATAGAAGGC	TTTTTGTAT	60
TACTTCTCTT	TGGCTATGAA	GCCACATTGG	GATTATCGTC	TACCGAGGAT	GAAGGCGAGG	120
ACCCCTGGTA	CCAAAAGCA	TGCAAGTGG	ATTGCCAAGG	AGGACCCAAT	GCTCTGTGGT	180
CTGCAGGTGC	CACCTCCTTG	GACTGTATAC	CAGAATGCC	ATATCACAAG	CCTCTGGGTT	240
TCGAGTCAGG	GGAGGTCACA	CCGGACCAGA	TCACCTGCTC	TAACCCGGAG	CAGTATGTGG	300
GCTGGTATTC	TTCGTGGACT	GCAAACAAGG	CCCGGCTCAA	CAGTCAAGGC	TTTGGGTGTG	360
CCTGGCTCTC	CAAGTTCCAG	GACAGTAGCC	AGTGGTTACA	GATAGATCTG	AAGGAGATCA	420
AAGTGATTTC	AGGGATCCTC	ACCCAGGGGC	GCTGTGACAT	CGATGAGTGG	ATGACCAAGT	480
ACAGCGTGCA	GTACAGGACC	GATGAGCGCC	TGAAGTGGAT	TTACTACAAG	GACACTCTCG	540
AG						542

(2) INFORMATION FOR SEQ ID NO:1429:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1429:

GAATTCGCGG	CCGCGTCGAC	TTAAGAGTCT	GCTTCGGAGA	CCGTAAGGAT	ATTGATGACC	60
ATGAGATCCC	TGCTCAGAAC	CCCCTTCCTG	TGTGGCCTGC	TCTGGGCCTT	TTGTGCCCA	120
GGCGCCAGGG	CTGAGGAGCC	TGCAGCCAGC	TTCTCCCAAC	CCGGCAGCAT	GGGCCTGGAT	180
AAGAACACAG	TGCACGACCA	AGAGCATATC	ATGGAGCATC	TAGAAGGTGT	CATCAACAAA	240
CCAGAGGCGG	AGATGTCGCC	ACAAGAATTG	CAGCTCCATT	ACTTCAAAAT	GCATGATTAT	300
GATGGCAATA	ATTTGCTTGA	TGGCTTAGAA	CTCTCCACAG	CCATCACTCA	TGTCCATAAG	360
GAGGAAGGGA	GTGAACAGGC	ACCACTAATG	AGTGAAGATG	AACTGATTAA	CATAATAGAT	420
GGTGTTTTGA	GAGATGATGA	CAAGAACAAT	GATGGCATAC	TCGAG		465

(2) INFORMATION FOR SEQ ID NO:1430:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1430:

GAATTCGCGG	CCGCGTCGAC	GCTGTTTCATG	AGGAGACTTA	ACCACAATTC	AAAGTGTAGC	60
AGTTGTGTAT	TTTAGCATT	TAATATTGA	TTGAGGCCCT	GAGGTGTAA	TATCTCAATC	120
TCAGAGTTAG	ATGTTTCATG	CCTTTTGA	TTTTTTAAAC	ATTTTTCATA	ATTTTTTTTT	180
TAAGTTAGGG	AGCACATTGA	GTGAAGTTCT	CTGTGTAGAA	CAATACCTTC	TGCTCTGCTT	240
CTCCCAGCTT	TCACTGAGGG	CTGGAAGG	ACAGGCCTGT	CCAGCTGTAC	TGTCCTCACTG	300
TGTATGGGA	AGCTCAGGCT	CTGGTGAAG	CAGGGGCAT	GGATGTCAA	CAACTGATGT	360
GCAAACTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:1431:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 632 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double.
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1431:

GAATTCGGCC	TCATGGCCT	ACTACTGATG	AGAACATTAT	CTGCATATGC	CAAAAAATTT	60
TAAGCAAATG	AAAGCTACCA	ATTTAAAGTT	ACGGAATCTA	CCATTTTAAA	GTTAATTGCT	120
TGTCAAGCTA	TAACCACAAA	AATAATGAAT	TGATGAGAAA	TACAATGAAG	AGGCAATGTC	180
CATCTCAAAA	TACTGCTTTT	ACAAAAGCAG	AATAAAAGCG	AAAAGAAATG	AAAATGTTAC	240
ACTACATTAA	TCCTGGAATA	AAAGAAGCCG	AAATAAATGA	GAGATGAGTT	GGGATCAAGT	300
GGATTGAGGA	GGCTGTGCTG	TGTGCCAATG	TTTCGTTTGC	CTCAGACAGG	TATCTCTTCG	360
TTATCAGAAG	AGTTGCTTCA	TTTCATCTGG	GAGCAGAAAA	CAGCAGGCAG	CTGTTAACAG	420
ATAAGTTTAA	CTTGCATCTG	CAGTATTGCA	TGTTAGGGAT	AAGTGCTTAT	TTTTAAGAGC	480
TGTGGAGTTC	TTAAATATCA	ACCATGGCAC	TTTCTCCTGA	CCCCTTCCCT	AGGGGATTTC	540
AGGATTGAGA	AATTTTCCA	TCGAGCCTTT	TTAAATGT	AGGACTTGTT	CCTGTGGGCT	600
TCAGTGATGG	GATAGTACAC	TTTTCACTCG	AG			632

(2) INFORMATION FOR SEQ ID NO:1432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1432:

GAATTCGGCC	TCATGGCCT	ACTAATTTCC	AAGAGCTAAA	CTTTATACCG	CCTGCAATAT	60
TTCCATTAC	TACCAGTTT	TTTCTGACCT	AGTCAGATAT	AAGAAGCCCC	CTTACTGGAT	120
ACAAGACAGT	TAATTATCAG	ATCCAGTCTG	ATCCTAGATC	CAGTCTGATC	CTAGACCCAG	180
TCCAGTTTCT	GTTGTGACTT	CCAAACCCAG	TTTGATCAG	AAATTTGCTC	AAAGAACTA	240
GGAGAGCTCA	AAACACAAAT	ATGTGGAGCT	TCTGAATCTG	AGAGAGAACG	AACTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1433:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1433:

```

GCGTGGTTTC ACCTTGTTGG CCAGGCTAGT CTTGAACTCC TGACCTCAGG TGATCCACCC      60
ACCTCGGCCT TCCAAAGTGC TGGGATTACA GGCATGAGCC ACCGCATCTG ACTGGTGAC      120
TTTACTTTGA CCTGTCATAA ATCCCTTGGT TTGTTATTAC TAGTTTTTAC TTTAGACAGC      180
AATTATCTTT CAAGGAAAAA TTAAAAGGA AAAAATGTCT TATATTACC CTCATGTTTA      240
CCATTCCCAG TGCTCTTTAT TTCTTTATGT CAATCCGGAT TTCAATTGT TATCATACTG      300
TTTCTGCCTG AATAACAGTT TAACAGCAAC TCGAG                                335

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(2) INFORMATION FOR SEQ ID NO:1434:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1434:

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GAATTCGGCC TTCATGGCCT AATGCTCTGT GTCAGTGTCT CCCGGTGCTC AGCACAGACA      60
AGTTCAAGAC AGATTTTAT GATCAATGCA ACGACGTGGG GCTCATGGCC TACCTCGGCA      120
CCATCACCAA AACGTGCAAC ACCATGAACC AGTTTGTGAA CAAGTCAAT GTCCTCTACG      180
ACCGACAAGG CATCGGCAGG AGAATGCGCG GGCTCTTTT CTGATGAGGG TACTTGAAGG      240
GCTGATGGAC AGGGGTGAG CAACTATCCC AAAGGGGAGG GCACTACACT TCCTTGAGAG      300
AAACCACTGT CTCGAG                                316

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(2) INFORMATION FOR SEQ ID NO:1435:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1435:

```

GAATTCTAGA CCTCCACCC TGTAGACAT TCTCCTCACT TAGGAGATAG TCATATTTTC      60
AGGCTGCCTT TGAAACTGTG GGTACACAAA CAGCAGAGCG ATCTATTTCA GCAGTTGAAG      120
TTGTATTTGA GCCATTATTT CTTCCACTCT CTTTTTGGTT GAGTTTCTAG GAAGGAAAGG      180
GCTGAACTCC ATGACTGCTC ATATTACAGT GCTAAGTCCT CACAGCCATC CACTGTTTAT      240
ACACAAGAAG AAAGTAGGCC CACCAAGAGT AAGCGCCTGC CTGAGGTCCG TGAGTGAGTA      300
AGGGCCAAAG GTGAGGTTGG GATCTGGCCC TTTCTCTTT CTGGCCACCA CAGGGCACTA      360
CCTCCCATAC CCACACTC GAG                                383

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(2) INFORMATION FOR SEQ ID NO:1436:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1436:

GGAGAACTGC TAAGGTCCAC AACGTCGACA ATTGAAAGCT TTGCTGCACA AGAAAAACAA	60
ATGGAAGTTT GTGAAGTATG TGGAGCCTTT TTAATAGTAG GAGATGCCCA GTCCCGGGTA	120
GATGACCATT TGATGGGAAA ACAACACATG GGCTATGCCA AAATTAAAGC TACTGTAGAA	180
GAATTAAAG AAAAGTTAAG GAAAAGAACC GAAGAACCTG ATCGTGATGA GCGTCTAAAA	240
AAGGAGAAGC AAGAAAGAGA AGAAAGAGAA AAAGAACGGG AGAGAGAAAG GAAAGAACTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:1437:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 228 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1437:

GAATTCGGCC TTCATGGCCT AGACTTTTAC ACATTTTAT TAGCTACCTG GAATTATTTT	60
TGTAACACGT TAAGTGTAAT TAAACAAATA ATGCTTTGCT TTTGTGTTTC TGGAAATTATT	120
GTGTTATTTT TTTGCCAAAT GCATATATCT TCAGGTCTTT TTTTATAAC CATATGCATA	180
CCAAGGCACC ATTCCATTGA CTTTCCAAC TCTGTCCCAA CCCTCGAG	228

(2) INFORMATION FOR SEQ ID NO:1438:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 498 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1438:

GTGAATTCCA GTCCCCACCC AGAAACCCGC AGCATGATTG TCTGCCTCCT TTTCATGATG	60
ATTTTATTGG CAAAGGAAGT TCAACTGGTA GACCAAACAG ATTCACCTTT ACTTAGTCTC	120
CTTGGACAGA CAAGCTCACT TTCATGGCAT CTTGTGGATA TTGTGTCGTA CCAGAGTGTG	180
CTAAGTTATT TCAGCAGCCA TTACCCGCCG TCCATCATCC TGGCAAAGA ATCTTATGCT	240
GAATTAATCA TGAAGCTCCT AAAAGTGTCT GCGGGCCTTT CTATTCTTAC TGACAGCCAG	300
AAGCATCTTG ATGCAGTTCC AAAATGCCAA GCTTTTACTC ATCAGATGGT TCAATTCCTC	360
AGCACCTGG AACAAAATGG AAAATCACC TTAGCAGTCC TAGAACAGGA AATGTCTAAG	420
CTCTTAGACG ATATCATTGT CTTTAACCCG CCCGACATGG ACAGCCAGAC CCGCCACATG	480
GCCCTCAGCG GTCTCGAG	498

(2) INFORMATION FOR SEQ ID NO:1439:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 314 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1439:

GAATTCGGCC	TTCATGGCCT	AGCAGGGAGA	GGGTTCTGT	GCTCCTGAGA	TTAGTTCAGA	60
TGGTCTAACC	ATTGTCTAT	ATGTGCATT	TAGTTAATAT	TGTGTATTAA	AGGATAAGTC	120
TTAATGCTCA	AAGTATGTTA	AAAATAGATG	TAGTAAATCA	GTCCCTTTGT	GAATGTCCTT	180
TTGTTAGTTT	TTAGGAAGGC	CTGTCCTCTG	GGAGTGACCT	TTATTAGTCC	ACCCCTTGGA	240
GCTAGACATC	CTGTACTTAG	TCACGGGGAT	GGTGAAGAG	GGAGAAGAGG	AAGGGTGAAG	300
GGAAGTGGCT	CGAG					314

(2) INFORMATION FOR SEQ ID NO:1440:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 424 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1440:

CCAGCCGTCT	GCAGTCCCG	CCGCCACTTG	CGCCTCTCCA	GCCTCCGAG	GCCCAACCGC	60
CGCCAGCACC	ATGGCCAGCA	CCATTTCGCG	CTACAAGGAG	AAGATGAAGG	AGCTGTCGGT	120
GCTGTCGCTC	ATCTGCTCCT	GCTTCTACAC	ACAGCCGCAC	CCCAATACCG	TCTACCAGTA	180
CGGGGACATG	GAGGTGAAGC	AGCTGGACAA	GCGGGCCTCA	GGCCAGAGCT	TCGAGGTCAT	240
CCTCAAGTCC	CCTTCTGACC	TGTCCCCAGA	GAGCCCTATG	CTCTCCTCCC	CACCCAAGAA	300
GAAGGACACC	TCCCTGGAGG	AGCTGC AAAA	GCGGCTGGAG	GCAGCCGAGG	AGCGGAGGAA	360
GACGCAGGAG	GCGCAGGTGC	TGAAGCAGCT	GGCGGAGCGG	CGCGAGCACG	AGCGCGGGCT	420
CGAG						424

(2) INFORMATION FOR SEQ ID NO:1441:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 346 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1441:

GAATTCGGCC	TTCATGGCCT	ATAGGCCATG	AAGGCCGGCC	TTCATGGCCT	AGTCAGGCTT	60
AAGTTTAATA	AATAGCAAA	TGCATACAGA	TATTTACAAT	GATCGAAAGA	CAAACAGAGG	120
TCCTATCCGT	GCAGTCCCAA	CAATAAGAC	AGGCATTGGC	ATAAAGTJTT	TATAAATTCT	180
TGGGTACAGC	TGTTCTGAAA	GTAAAGTTCA	CTTTCAATCC	TAAAAAAGT	CCGCTATTCC	240
TCCCTGGCTG	CTCTGGACTG	TCCTCATCCT	CTTTAGCTGC	TGTTGCGCCT	TCCGCCACCG	300
ACGAGCTAAA	CTCAGGCTGC	AACAACAGCA	GCGGCAGCAT	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:1442:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 591 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1442:

```
GAATTCGGCC TTCATGGCCT AGGCTTCCCT GTTCCCTCAG CCCAGTCTGA GAGGAAAGAG      60
AATCGGGCCA CTGCCAGAAA GAGAGTCAAG CAAACCTGGA AGGGCAAATC TGAGAGTGGG      120
AAGGCCAAAG GCCGAGGCCC AGATTAGTA TTTACTAGCA GCGCCTTCGG GTAGCAGGAT      180
GATTCTTTT CCTGCCTGTC TGCTGCTGTC TCTCTTCCCT AAGGTACAGG TTGGCAGGAC      240
CACCTCCGCC TACTTCTCCA CCATCCCTAG CATGCCAGCC CGTTCCCAAG TCAACCTGCC      300
AGTGGAGTCA GGCAGTGAC TCCTGGAGCC AAGAGGGAAG GGCAGGGTAG AGAGGGTATG      360
TCCAGTAGCC TGGAGCTCCA TGGTGGCTTC ATGCCTCCCT TCTCCAGCT CAGGTGGCCC      420
TGAGGGCTCC CTCGGAACAG TGCCTCAAT CCTGACCCAA GGGCCAGCAT GGGGAAGAGA      480
TGGTTGCAGG CAAATGCAC TTTATAGAGA TTTTCTATTG CTGGGAAGGT GTGTTTCTCC      540
CACAATTTGT TTGTGAATAT TCACTGTGTT TATAAATGTC TGACCTGTCC G      591
```

(2) INFORMATION FOR SEQ ID NO:1443:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 526 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1443:

```
GAATTCGGCC TTCATGGCCT AGATGAATT ACCTGCCTCG AGCTCCTGTC CTTAGGTGAT      60
CTGCCCCGCT TGGCCTCCCA AAGTGCTGGG ATTATAGGAG TGAGCCACCT GGCCCAAGTA      120
GCTTTTAAAG TTCTGCCAGC ATAGCCCCGG GATGGGGTGG GGGTAGACAG GGCCTTAGGA      180
CTTTTCAATTT TAAATGCTC ACTCCACAGT GAAGAAACAG GTGATGACTA TCCTGAATAT      240
TTGGGAAGCT GTGTCCTAGA ATTTTGGCC TCAAGTCCAG AACCCACAGC TTCTTTACAA      300
CATGCTTCAA GCCTGGGACT GAGCTGCCAG TAAATAAACC CCTAGTAACC TTAATATGGG      360
TTAATAAGAT TAGGTGCCCG CTCTGCACGC TCCCCTGCCC CTCCTCGTCC GGGCACCTGT      420
TATGCTAGGC CAGCATGTTT GCAGCTTAGC CAGGGAAAAT CGTGGACCAA GACAGGGCTT      480
TTCATCCACG ACTGGCTAAA AAGATGGCTC TCAATAATAT CTCGAG      526
```

(2) INFORMATION FOR SEQ ID NO:1444:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 279 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1444:

```
GATTGAATTC TAGACCTACC TCTCTTTTT TGTGGTCTCT CCTTCATTCT CTGTTTCAAT      60
CTCCGTGAGA TTTTCTGATT AGTAGTTACC TTCAGCATGC CAGTTGACTT GCAAACCTAC      120
AATCCAACCT TTCTTCTACT TTGTCATCTG ACAACAGCCT GGTTTGTAGC TGATTCAGG      180
ACTTCTTCAC TTGGGTGGCC ACTCTCATTA CCACAGAGTT CACTAGTCAT GGTGAACACA      240
CCAGTCTTTT ACACCTCCCT CACTCCCAA CCACTCGAG      279
```

(2) INFORMATION FOR SEQ ID NO:1445:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 644 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1445:

```
GAATTCGGTC TTCATGGCCT AGGGGAAGAA AGGCACCTTT CTCACAGGGT GGTGAGAGAG      60
AGGAAGGGGG ACGGGGAAAG CCCTTTATAA AAGCATCAGA TCGGCTGGGC ACAGTGGCTC      120
ACGCGTGTA TCCCAGCACT TTGGGAGGCC GAGCGGGGTG GATCGCGGG TCGGGGGTTT      180
GAGGCCGGCC TGGCCAATAT GGTGAGACCC CGTCTCTGCT GAAGATACAA AAATTGGCTG      240
GGCATGGTGG CGGGCACCTG TGGTCCCGGC TGCTTGGGAG GCTGAGGCGG GAGAATCGCT      300
TGAGCCCGGG AGGCAGAGGT TGCAGTGAGC TGAGATCGCG CTAAGTCACT CCAGCCTGGG      360
CAACAGAGCG AGACTCCATC TCAAAAATAA AAGAAAGGCA TAAATATTAC ATTACCCTCT      420
GAATACTGTG GTTGATACT TGAGTTTTTA TGTGTGTATA TATATGTGTA TAGGAGAGTA      480
AAAATAAAAT GAAATTAGGA TTTTGCAAGT TATAATCATA TAAAATTGAT TACCCCTAAAT      540
ATATCATTAG GATATTATGT TATTTACATC TCTTATGCTA ATTCTAATTT TCTTTTATTG      600
TAGTATAGTA GAATTGAGAT TTGNNAAATG AATTGGTCCT CGAG                          644
```

(2) INFORMATION FOR SEQ ID NO:1446:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 756 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1446:

```
GAATTCGGCC TTCATGGCCT ACCTCACCCG GCCCGGACAC GGACAGGATT GACAGATTGA      60
TAGCTCTTTC TCGATTCCGT GGGTGGTGGT GCATGGCCGT TCTTAGTTGG TGGAGCGATT      120
TGTCTGGTTA ATTCCGATAA CGAACGAGAC TCTGGCATGC TAACTAGTTA CGCGACCCCC      180
GAGCGGTCGG CGTCCCCCAA CTCTCTAGAG GGACAAGTGG CGTTCAGCCA CCCGAGATTG      240
AGCAATAACA GGTCTGTGAT GCCCTTAGAT GTCCGGGGCT GCACGCGCGC TACTCTGACT      300
GGCTCAGCGT GTGCCTACCC TACGCCGCA GGC CGGGTA ACCCGTTGAA CCCCATTCGT      360
GATGGGGATC GGGGACTGCA ATTATTCCCC ATGAACGAGG AATTCACAGT AAGTGCAGGT      420
CATAAGCTTG CGTTGATTAA GTCCCTGCCC TTTGTACACA CCAACCCGTC ACTGACTTTT      480
ACCGCAGCTG GAACTGTGCT CCAGGGCCTT TCCATCTTTT CCCCCACACT CCCTTTGACC      540
CTGTGTTGCC CTCAGAGGCC AAATTCTTGG GCTCAGGGAC TGGCTTTCGG CCTATTGGTG      600
GTGGAGCTGG GGTCTGGCA AGGAATTCA GGCAGCGCTT GGAGGCAATG TTCCCGGAGA      660
GCAGTTCACG GTGGTGATGT TGAATTATGA GCGGGAGGAA GTGCTTATGA ACTCTTTAGA      720
GAGGCTGAAT GGCCTCCCTT ACCTGGAAT CTCGAG                          756
```

(2) INFORMATION FOR SEQ ID NO:1447:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 359 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1447:

```

GAATTCGGCC TTCATGGCCT ACCTGCCTCG AGGTCCTGG GATCATCTGA ACAGAAGTGC      60
ACAGGCTACT TGTACAGAGA AAAAATTAAT ACTCAAAGGA AATCTTCATT TTTTAGATTG      120
ACTTTGGGAA TTTGAATTTT CATCAGTGCA AATATAAATT TCTCTATCCT GCTCTGAGGC      180
TAATTGGTAC CATATTTTCC CTTTGTGTCT TGTGACTCTG CCACATCCCA TCTCATCCTG      240
GCCTCTGAGT CAAGAACCCA GTGAAGTAC TTTCTAGTTC TAGAAGTTCC GCTGCAAGGC      300
CAGGAAAGCT TGAGAAAGGT ATTGTGGAAG AAGCAAAGGT AGACCCCAT TCACTCGAG      359

```

(2) INFORMATION FOR SEQ ID NO:1448:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1448:

```

GAATTCGGCC TTCATGGCCT AGGAAAATA AGTTAATTCT AAATCAAATC TAAATATTAT      60
ACCTCATGCT ATGGTTTTAT TTTATTTTCTG TGCTGCCGTT ACTTTTCCTC CCCAAAGCAA      120
TGTGTTTTCC AGCCACAACC CTCGAG      146

```

(2) INFORMATION FOR SEQ ID NO:1449:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1449:

```

GAATTCGGCC TTCATGGCCT ACTTTTCAA AGCAGCTTTG CTCTACTGAT TTGGGTAAAA      60
GCTTAGTTGC AGTTGGNTTG GGAGGAAATG GGAGCAGAAA ATTTGAGAGA GTGAGTGTAG      120
ACAACTCTTT CAAGGAATTT CGCTATAAAT GGGAGTAGAG ATCTGAAGAC TGAATAATTA      180
GCAAACTGAA AAGTGGGAAG ACGTAATTCT CTTATTATTT CATTTTCTT AGTGAAATAA      240
GAGGTGAAGT TCTCTGAGTA ATAGGAGGGT CAAACAGGNG TTAGAAGTTC ACAAAGAAAG      300
GTCTCGAG      308

```

(2) INFORMATION FOR SEQ ID NO:1450:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 545 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1450:

```

GAATTCGGCC AAAGAGGCCT AGCATGTTGT GGCTGTTCCA ATCGCTCCTG TTTGTCTTCT      60
GCTTTGGCCC AGGGAATGTA GTTTCACAAA GCAGCTTAAC CCCATTGATG GTGAACGGGA      120
TTCTGGGGGA GTCAGTAACT CTTCCCCTGG AGTTTCCTGC AGGAGAGAAG GTCAACTTCA      180
TCACTGGGCT TTTCAATGAA ACATCTCTTG CCTTCATAGT ACCCATGAA ACCAAAAGTC      240
CAGAAATCCA CGTGACTAAT CCGAAACAGG GAAAGCGACT GAACTTCACC CAGTCCTACT      300

```

```

CCCTGCAACT CAGCAACCTG AAGATGGAAG ACACAGGCTC TTACAGAGCC CAGATATCCA 360
CAAAGACCTC TGCAAAGCTG TCCAGTTACA CTCTGAGGAT ATTAAGACAA CTGAGGAACA 420
TACAAGTTAC CAATCACAGT CAGCTATTTT AGAATATGAC CTGTGAGCTC CATCTGACTT 480
GCTCTGTGGA GGATGCAGAT GACAATGTCT CATTGAGATG GGAGGCCTTG GGAAACACAC 540
TCGAG 545

```

(2) INFORMATION FOR SEQ ID NO:1451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1451:

```

GAATTCGGCC AAAGAGGCCT ACAGTAAGCA GATGAACTTG CTTGCTGTTC TCGAAGTGAG 60
GACTGAAGGG AACGAAACT GGGGTGGGTT TTTGCGCTTC AAAAAGGGGA AGCGATGTAG 120
CCTCGTTTTT GGACTGATAA TAATGACCTT GGTAATGGCT TCTTACATCC TTTCTGGGGC 180
CCACCAAGAG CTTCTGATCT CATCACCTTT CCATTACGGA GGCTTCCCCA GCAACCCAG 240
CTTGATGGAC AGCGAAAACC CAAGTGACAC AAAGGAGCAT CACCACCAAT CCTCTGTAAA 300
TAATATTTCA TACATGAAGG GAACCTCGA G 331

```

(2) INFORMATION FOR SEQ ID NO:1452:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1452:

```

GAATTCGGCC AAAGAGGGAA GGGAAAATTT CAAGTCAGAT AGAATTCTAT ATATACCATT 60
TCTTTGGAAC CTTAGCCCT CAAGATTCCA ACATCATGAC CTCAGTTTCA ACACAGTTGT 120
CCTTAGTCCT CATGTCCTG CTTTGGTGC TGCCTGTTGT GGAAGCAGTA GAAGCGTATA 180
TGCACGAAAA AGAAATGGAC AGATGTGACT TTGAAAGGCC TACTGAGTCA AACCTCACCC 240
TGAAAACCTT TGCAGCACTC GAG 263

```

(2) INFORMATION FOR SEQ ID NO:1453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 558 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1453:

```

GAATTCGGCC AAAGAGGCCT AATTTTAAAG CCCTGCTAAC TTCAATGTCT AGGTCACCCA 60
TTGTTTATT TTTATGGTCT TTTTTCATCC TGATTTTGG TCATTGGTC CCGTCTTATG 120
GCATACCTGG TAATATTTTA TTGAATCCTT AGTACTGTAC ATGAAAAATT GTAGAGGCC 180
CAGTAGTTTT CTTTCTCTGA AGAGGAGTCA CCCTTCCTT CACTAGACAG TTATGTTGG 240

```

GGTTATATAC	CTTACTCCAA	TCAAAGATTG	AGCTGAGTCA	GAAGTCTAAG	GGAGTTAAGT	300
TTTTGTGTCC	TCTGGGGACC	AGGGGTTCCA	ACTAAGACTG	TGATATTCAC	CAGGATCCAA	360
TTTCCCGATG	CCTCTTGAAC	TCTTATTCTT	ATCTTTTTAA	CACATCAAGG	CAGCTGGTTT	420
GCATTTTTCT	TTCTGTTTCA	CTTTTAGCT	TCATCCTTTG	CAGCTTTAGA	AATTGACAGT	480
TGTCTTACAG	GGAAAAGTAG	CTGTGTAACA	AGCTCATGTC	TCTGCCTCTC	TTCCACTGAT	540
ATCTTAGCCC	CGCAGGAG					558

(2) INFORMATION FOR SEQ ID NO:1454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1454:

GAATTCGGCC	AAAGAGGCCT	ACCTAAACCG	TCGATTGAAT	TCTAGAAATA	CAATGATTTT	60
AAAAAAGATT	TCCAAAGGCT	TTTCTTTTTT	TTCTTTTTTC	TNGAGACAGG	GTCTCACTCT	120
GTCGCCCAGG	CTGGAGTGCA	GTGACACAAT	CTCGGCTCAC	GGCAAGCTCC	GCACTGCCCC	180
CTCAGGTTCA	CGCCATTCTT	CCGCCTCAGC	CTCCCGAGCA	GCCGGGACCA	CAGGCACGCG	240
CCACCACGCC	CAGCCAACCT	TTACATTTTT	AGTAGAGACG	GGGCTTCACC	ATGTTGGCCA	300
GGATGGTCTC	GGTCTCTTCT	GCCTCGAG				328

(2) INFORMATION FOR SEQ ID NO:1455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1455:

GAATTCGGCC	AAAGAGGCCT	ACTTGATGTC	TGTGACCCAC	ACNTATTTCG	CACTCCCTC	60
CCCTTTTGAA	AATCCCTAAT	AAAAACTTGC	TGGTTTTTGC	GGCTAGTGGG	GCATCATGGA	120
ACCTACTGAC	ATGTGATGTC	TCCCCCGGAT	GCCCGGCTTT	AAAATTTCTC	TCTTTGTAC	180
TCTGTCCCTT	AATTTCTCAA	GCTGGCCGAT	GCTTAGGGAA	AATAGAAAAG	AACCTAGGTG	240
AATATTGGGG	CAGGCTCCCT	GATGAAATGA	TATATATTCT	TAAAATAAAC	TTTTCATCTT	300
TGCATATACG	TTTATATGCC	GAGTTTTTCT	CAACCTTGTC	TTACAGCACT	TTGTATACTA	360
CATTCTAGCC	ATACTAAACT	CTTGCACTTC	CTGAGACATG	TGCTGTATCC	TATTTCTTCT	420
GGTCCTTTTC	TCATTGATTA	ACTACCTGGA	GCATACTTTT	AATTCAGTGT	CAGCGCTCGA	480
G						481

(2) INFORMATION FOR SEQ ID NO:1456:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1456:

```

GAATTCGGCC AAAGAGGCCT ACTTCACCTT CAAGTCCCCT TTCTCAAGAA TCCTCTGTTC      60
TTTGCCCTCT AAAGTCTTGG TACATCTAGG ACCCAGGCAT CTTGCTTTCC AGCCACAAAG      120
AGACAGATGA AGATGCAGAA AGGAAATGTT CTCCTTATGT TTGGTCTACT ATTGCATTTA      180
GAAGCTGCAA CAAATTCCAA TGAGACTAGC ACCTCTGCCA ACACTGGATC CAGTGTGATC      240
TCCAGTGGAG CCAGCACAGC CACCAACTCT GGGTCCAGTG TGACCTCCAG TGGGGTCAGC      300
ACAGCCACCA TCTCAGGGTC CAGCGTGACC TCCAATGGGG TCAGCATAGT CACCAACTCT      360
GAGTTCCATA CAACCTCCAG TGGGATCAGC ACG                                     393

```

(2) INFORMATION FOR SEQ ID NO:1457:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1457:

```

GAATTCGGCC AAAGAGGCCT AGTGTGTGTG TGTGTGTGTG TGTGTGTGTT TTATCTCCTT      60
CAACTCTGAC CACCTGGAAG TCAGCCTAAT CTCTGCCCTC GTGTTGATCT TTAATTCAAC      120
ATTTAATTAC CTATCTTGGT ATCCATATGA ATTTGATTGT TTTTITGGCT TTTTITGAAC      180
TCATAAAAGG TATCCAAGTT CCTGGAGGGC ATAGTGCCCA TCTCCTCCCA TCCACCAAGT      240
GACATTCTTT TCCAAAAGAC ACATGG                                     266

```

(2) INFORMATION FOR SEQ ID NO:1458:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1458:

```

GAATTCGGCC AAAGAGGCCT AGGTTGTAGT TACTTTCAGA GTAGATACAG GGTTTTAGAT      60
CATTACAGTT TAAGTTTTCT GACCAATTAA AAAACATAG AGAACAAAAG CATATTTGAC      120
CAAGCAACAA GCTTATAATT AATTTTTATT AGTTGATTGA TTAATGATGT ATTGCCTTTT      180
GCCCATATAT ACCCTGTGTA TCTATACTTG GAAGTGTTTA AGGTTGCCAT TGGTTGAAAA      240
CATAAGTGTC TCTGGCCATC AAAGTGATCT TGTTTACAGC AGTGCTCTCG AG          292

```

(2) INFORMATION FOR SEQ ID NO:1459:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1459:

```

GAATTCGGCC AAAGAGGCCT AGTTTTATGA GAGGGTTTCC ATTAAGAAGT TAATTGAAAT      60
TCTTTATTTA TGTAATATGA AATTTCCAAT TAAATTATTT CACACAGCAT TTTTCCCCTT      120
TAATTTTATT AGTTTTTTTA TTTCTTGCCG GACCCAGGCC AGGAGCTTAG GGAAAATGAT      180

```


GAGGCCTCTT TTACGCTGTA GTCCTGCAAA TGCTGTGTTT TATTCCCCT CCCCTGCTCA 240
GCACTCACCC ACGACTGACA CATGGGGTAC ACACACACAC ATACTCGAG 289

(2) INFORMATION FOR SEQ ID NO:1460:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1460:

GAATTCGGCC AAAGAGGCCT ACACCTGCGT TGGAACATCT GATCCAGTGA TAGCACGTCA 60
CTAGGTGCCT TAATTAATAA AGCCAAAATA TCTTTCCACT AGCAAATAA TCGTATTCAC 120
TTTACTCTC CCATTITTA TTAATCTTTC CTATTTCATT TCACCCTCTC ATCTCTTTCC 180
TCTATTGGAT TATCTCAGGT ATCTAATCCA ATTCACACT GTTTAATGAA TGTAAATGCA 240
ACCACTCTGC AATTCCTAAG GTTTGTGTTT TTTGCTTTT TCTTTGTAG TCCATCTCTT 300
TGCTACACTC AAGCAGGTCT AGAATTCGAG 330

(2) INFORMATION FOR SEQ ID NO:1461:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1461:

GAATTCGGCC AAAGAGGCCT AGGGACAGTG ATTATAGGAC TCCACACATG CAACTGAATC 60
TAGCATTACT GACTTTAAAT TTTTGAGGCC TATCTAAAGG CCAGATGCTA TCAGCAGCTG 120
AACGGCATCT ACCAAAACCA GCTGCAAAGA TAGAAGCGGA ACAAATGGTT TGGTGGAGAG 180
ATTCGATAAC AACGAGTTGG GAAATAGGTA AAATAATAAC ATGGGGTAGA GGTATGCTT 240
GTGTTTCTCC AGGCCAAAAC CAGCAGCTGA TTTGGATACC ATCAAGATAC CTGAAAACCT 300
ATCATCAGCC AGATGCCAAG GAAGAGATT TGGGAGGAAC CCGAGGACCC CATGTTATTA 360
TTTACCTAT TCCCAACTC GAG 383

(2) INFORMATION FOR SEQ ID NO:1462:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1462:

GAATTCGGCC AAAGAGGCCT ACGATGACGT CACCGTCACC ACCGGCGTGA AGCGAGACAG 60
TGGTGAGGCG TTCTGGACTG GATGGAGGAC CTGAAGACAT GAGGTGGAGG CACAGGTAGA 120
AGAGAAGATT CTCACCATCG CTGATTACCA CAAAAGCATT TCTCCAAGTG GTTGCAAGATG 180
ACATGATTTC CCAAAGTGT AGAGCTGAAG TGTGTTTCCT TGTGTATATA TACTGTGGTT 240
CCTTTATCCC TTCATCTGTG GATAGACAGG TGCAACCGTG TGGTTCCCA CGATATGATT 300

TCATTGTGGT TTTCTGTCTG AAGAGTATCC CAGTATGTAC CTGTGGAGCA GCTTCTTTAT 360
CCCTTCTTAC TCGAG 375

(2) INFORMATION FOR SEQ ID NO:1463:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 174 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1463:

GAATTTGGGC GGAGACACAA ATTCAAATCA TATCAACCTG GTAAAGAATT TGGATTTTAT 60
TTTGAGTGTG TTAGTGAGTA TTGCATGGCT TTGAGCAGAG AAAGGATGAT TTATATGTTT 120
AAAAGAGTGC TTTGCCTCTT ATATGTGGAA GAGATTGTAG GAGGAGGACT CGAG 174

(2) INFORMATION FOR SEQ ID NO:1464:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 122 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1464:

GAATTCGGCC AAAGAGGCCT AGTTGCGGTT TAAATTTCCA AATGTATGGC ATTTGCTTGT 60
TTTTTAAGTT GATTTCTAGT TTTATCACAT TGTGGTCAGA GAATGCTGAG AAAGAGCTCG 120
AG 122

(2) INFORMATION FOR SEQ ID NO:1465:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 315 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1465:

GAATTCGGCC AAAGAGGCCT ACTTGAGCTT TTTTCATGTG TATATATTGA TGCTTCTTTT 60
CTAAAAAAA TTGAGATGGA AATTCACATA ACAGAATTAA CTAAAGCATA CATTTCATTG 120
GTATTTACTA CATTACAAT GTTGTCAT CATTACCTCT CTCCAGTTCT AAACATTTCA 180
TCACCCCAAA AGGAACCCCT AAGCGGTCAC TCCCCACTCC ACTGTCTCCC ACAGCCCTG 240
GCAACCAGCA GTCTGCTTTG TGTCTCAATG GATTACCTA CTCTTGATAG CTCTACAAAT 300
GGAACAATAC TCGAG 315

(2) INFORMATION FOR SEQ ID NO:1466:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 175 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1466:

GAATTCGGCC AAAGAGGCCT AGGTAAGAGA AACGACCAAT TCTACCAGTT ATTCTACAAT	60
GTGGGTTTTTC ACTGCTCTGT TCACATGCCT TATTCAGACT TCTTGTGGTG GTCGAATGCT	120
AGATGGTCTG TTGGAATTAT CTGCTGTCAT ACATCCAAAA AGGTCTCACA GAGAG	175

(2) INFORMATION FOR SEQ ID NO:1467:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 350 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1467:

GAATTCGGCC AAAGAGGCCT AGAAGGACAC CTCCATCCAT TCCACGCAGT TGCTCAAAGC	60
AGAAATTTTC AGTGCAAGTC TTGATGCTGC GCCGTCCCCC ACTCCCTACA TCAGAACGCA	120
TCCCTCATCT GGACTCCAGC GGTGGCTTCT TGATGCTGCG CGGTCCCCCA CTCCCTACAT	180
CAGAAATGCAT CCCGCATCCA GACTCCAGCG GTGGTGCTCT ACCTGCACGC TGTGCGCAAG	240
TCCAAGCTAC CATACTCCTG CCTGAGCTAT GACAACAGCC TCCTCACTGA TCTCCCCTTT	300
CTTCCTTTG CCTCCTCCAG CTCATTTTC ACAGTGTAGA ATGACTCGAG	350

(2) INFORMATION FOR SEQ ID NO:1468:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 419 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1468:

GAATTCGGCC AAAGAGGCCT ACTATACTAA AATTCTGTGC AAAAAGATGC TTGAAATTAT	60
TGTAGAGACT GAATCTTTGC TGCTTGTAT AAATATTGCA GGGCATAAAC CTTCATTCA	120
TAGGTTCATC AGCTTTTATG ATTGGGAGTG ACAGGGAGGC AGCATTGCAG TCCTTAGTCC	180
TAGGTGTGGT CTAGAATTAA CCCTGTATTT AAGTCACTTT GGAATAGAAG TTTTTTTTCT	240
CGGACAGGAT ACACTATATA TTTTAAATC TCCTCCATA GTCGTAGTGC AGAGATATAA	300
ATAGAAGTAC AGGTAAGAGA TGTCTTCTGC CTTTCAAACC CTTCTAAGT TTGTGTGCTG	360
CTTTAACTTT ATTCACATAG AGCAGTCTGT TTTATTACTC AGGATATGGG CCACTCGAG	419

(2) INFORMATION FOR SEQ ID NO:1469:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 612 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1469:

```

GAATTCGGCC AAAGAGCGAT GGGGACAAAG GCGCAAGTCG AGAGGAAACT GTTGTGCCTC      60
TTCATATTGG CGATCCTGTT GTGCTCCCTG GCATTGGGCA GTGTTACAGT GCÂCTCTTCT      120
GAACCTGAAG TCAGAATTCC TGAGAATAAT CCTGTGAAGT TGTCTGTGTC CTACTCGGGC      180
TTTTCTTCTC CCCGTGTGGA GTGGAAGTTT GACCAAGGAG ACACCACCAG ACTCGTTTGC      240
TATAATAACA AGATCACAGC TTCCTATGAG GACCGGGTGA CCTTCTTGCC AACTGGTATC      300
ACCTTCAAGT CCGTGACACG GGAAGACACT GGGACATACA CTGTATGGT CTCTGAGGAA      360
GGCGGCAACA GCTATGGGGA GGTCAGGTC AAGCTCATCG TGCTTGTGTC TCCATCCAAG      420
CCTACAGTTA ACATCCCCTC CTCTGCCACC ATTGGGAACC GGGCAGTGCT GACATGCTCA      480
GAACAAGATG GTTCCCCACC TTCTGAATAC ACCTGGTTCA AAGATGGGAT AGTGATGCCT      540
ACGAATCCCA AAAGCACCCG TGCCTTCAGC AACTCTTCT ATGTCCTGAA TCCCACAACA      600
GGCGCACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:1470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1470:

```

GAAAAGCCAA GACTTAACT TTCATTACAT ATCTAATAGT TGATATCACC AGTTACCATT      60
TTGAATTTTG TATAGTACTA GGTTAGAACA TTGCTTAATC CTTTTAAAAA AAATGCATTT      120
ACGTAGAACT CGAGCAGGAT GTTGGCCCC GATGTTTTTT TTTCATACTC TTCTGTCGCC      180
TCCTCCCAT TCTGCACAGT TCTCACCAC TACTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1471:

```

GAATTCGGCC AAAGAGGCCT AGGGCATCAT GCAGACACAT CTGTTAAAGC AGGAAAAAAA      60
AAACCATGTG GAAGATTAAG CTAGGCAGAG TGCCTGAAAA GCCCTCTGCA ATAAGTTGAG      120
CTGGAAAAAC CTCCATATCT AAAGATGCTT TAATCATCTC AAGAACACCA ACAACATTTT      180
CTATTATAAT ATAACATGA TAGATGTGAA TCTACCTCTT GGATTAAGGC AATAATTTTA      240
TAGCTATCAA ATTTTCACAG ACACCATTTT CACTACTCTG AGTTGCATCT CTAACAAGCT      300
TCTTTAGCCT CTGCCTACAG ATTTCAAGTGA CAAAGCCATT CAGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1472:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1472:

GAATTCGGCC AAAGAGGCCT ACAACAAACC ATTCTTCAGC ACCTTTGCAA AAACATCTAT	60
GTTTGTTTTG TACCTTTTGG GCTTTATTAT TTGGAAGCCA TGGAGACAAC AGTGTAACAAG	120
AGGACTTCGC GGAAAGCATG CTGCTTTTTT TGCAGATGCT GAAGGTTACT TTGCTGCTTG	180
CACAAACAGAT ACAACTATGA ATAGTTCTTT GAGTGAACCT CTGTATGTGC CTGTGAAATT	240
CCATGATCTT CCAAGTGAAA AACCTGAGAG CACAAACATT GATACTGAAA AAACCCCGC	300
GGTACTCGAG	310

(2) INFORMATION FOR SEQ ID NO:1473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1473:

GAATTCGGCC TTCATGGCCT ACAACTTTAA GATTAGCTAC TTTGAATAAT CTCAGTAGGT	60
TCTGGGGCAC AGGAGCTGCC CCTCTTGGTC TGAGATTGG CCATGGGGTG ATTAGGACAG	120
GTATAGTGGC ACAGAGTGTA AAAACCCCAT AATGGTGTGG ATTCTGGATT GCTTAGTTTG	180
CATTTGACAA GTGCATGCCT GGGAGGAGGA CTCCTCTTAG TAAAGAGGAT GGGAGGCAAG	240
AAGAGAGGCC AGAGGCCAAG ACAAGGTAAC TTAGGCATAG CATCAGGTTG TCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:1474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1474:

GAATTCGGCC TTCATGGCCT AAAAAAGTAT GCAACACTCA GTTTATTTAA TACTTACAAG	60
GGGAAATCAT TAGAAACACA GAAAACCACA GTTGCACTC GACATGGATT ACAGAGTCTT	120
GGAAAAGTCG GTATTTACAG GCGTATGCCT CCACCTGCTA ACCTCCCAAG TCTTAAAGCA	180
GAAAACAAAG GCAATGATCC TAATGTAAAC ATTGTACCTA AAGATGGCAC AGGGTGGGCA	240
TCAAAACAAG AGTAACATGA AGAAGAAAAA ACACCAGAAG TGCCACCAGC ACAGCCAAAA	300
CCTGGGGTTG CAGCTCCCCC AGAAGTAGCA CTGCTCCCA AATCATGGGC CAGTAACAAG	360
CAAGGTGGGC AAGGAGATGG AATCCAAGTG AATAGTCAGT TTCAGCAAGA ATTCCCAGC	420
CTGCAGGCAG CTGGGGATCA GGAAAAAAA GAAAAGGAAA CAAATGATGA CAACTATGGA	480
CCTGGACCCA GTTTACGTCC ACCACTCGAG	510

(2) INFORMATION FOR SEQ ID NO:1475:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1475:

GAATTCGGCC	TTCATGGCCT	AATCCATTCA	TTTGATGGAC	ATTTTCTAAG	TACCTGTGAG	60
CCAGGTGCTG	CCATTTCAAA	GTCTCTTCT	ACCACGCTCC	TCAGTGGCTA	GACATTTTCA	120
CGTGGCCAGA	AAGTCCCGAC	TCTTGCTGGG	CGTCCCTGGA	CAAGTTGCCT	TCCTCCTCTG	180
AGCTTGGCGC	TCCCCATCTG	TATAGTGGAG	ACCCTTGGCC	CCCCTCTGTA	CGGAAGGGCC	240
GATGCGAAGC	TGCAGTTAAA	AAAGGCTCAC	ATGCTCCTAG	CCTTGTGCAG	TCAGGAGGGG	300
AGACCAGGAC	AGTTGGAAAT	TATGATTGCA	AATGGCTTTG	CATTTTAGAT	CATTCGTGTG	360
TGTGGATCAG	AGAAACGCAC	AAGTCCCTG	GCATCTCGAG			400

(2) INFORMATION FOR SEQ ID NO:1476:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1476:

GAATTCGGCC	TTCATGGCCT	ACCACATTTT	GTCAGCAGAG	AGCCTTTTAA	ACTTGGATTG	60
CAACTTCCTG	TTGTCTAAAC	GGAACCCTCC	GAACGTAGGA	CTTATAGGGG	AAGCTGTGTG	120
GCATGTCAAA	AAAATACTA	ATCAGAATGA	GCTTTGTCAT	CCAGAGCCAG	AAGTGTGCA	180
GAAATTTTTA	TAATTTTGCA	ACTTCTTTT	TTACAAGGAA	CTTTTGTGCT	ACTACACATC	240
AGGACTTTTG	AAGCATCCAA	TAAATCCATT	TAATAAGTAT	GAGCATGTGT	CTGAGTGGAC	300
AAGAAAGTGA	AACCATCCAT	GCTACATTGG	ATAATTTTTC	CTCCCCAGA	CTGGACAGGG	360
AATCTCAGCT	TTCAAAACAG	AGTAACCTGG	CTCCACTTAC	AAAGCTGCAC	AGGCATTAAA	420
GATCGTGTG	CCTTTGTTAG	GCAGATTGG	AGGGGAGAGC	TCGAG		465

(2) INFORMATION FOR SEQ ID NO:1477:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1477:

GAATTCGGCC	AAAGAGGCCT	ACATGTAGCT	ATCCTAAGAC	GTATTTTATT	TTGAGCCACT	60
TTCTCAGAGG	GAATTGGGTG	GGTGTGGTCG	TAAGAACACC	TAGAAAATAG	GGGTGAAACC	120
TTTATGGGGC	CAGGGGAGCC	ATGGCAGAGG	GTGGAGTGGG	GGATAGAAGC	CTTCAGACTC	180
CTCCGCCCCA	GCCACTCTGC	ACCTGGGGCC	TTTCAGCTGT	TAAAATGAAA	AGCCAATTAT	240
CTTCTGTAAA	TGAGGGAAAA	AAAGAAGGAA	TAAAAGTGTC	TATTATGTAT	GCTGATATGC	300
ATAACACTTC	AAATAAAAGG	ATATATAAGC	ACTTGACAAA	TTGAGGGAGA	AGGAGGGGAG	360
AGTGCTGGGC	GCTCGAG					377

(2) INFORMATION FOR SEQ ID NO:1478:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1478:

GAATTCGGCC	AAAGAGGCCT	AGAGATTCAG	TTTATTCTAT	ACTCAGACTT	TGGTATCCCC	60
TTAGATGCCC	ATGTCAAAAA	TGAGAAAGTT	GGTGACATGG	TATGGCATT	TATTGCTTTT	120
TGTTTGTTTT	CCATTGCTAC	TTTCACTCAA	ATTCCAAGGA	AATCACAGAA	GAAGGGCTTT	180
TGGTGACCTA	AAAGTAGAAA	TGAAAGCAAC	AAAATGCATT	CTGTCCAGCA	GTACACTGAA	240
GACAAAAAAT	GTAGTTGAAA	AGTCTCAGGG	AGCGCTCGAG			280

(2) INFORMATION FOR SEQ ID NO:1479:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1479:

GAATTCGGCC	AAAGAGGCCT	AATTTGCTTT	GCCCACTAGT	TGGAAGTGA	ACTCGACTCG	60
TGATGGTTCT	CCTGTCCTT	TGGTTGATAG	CAGCCGCTCT	GGTAGAGGTT	AGGACTTCAG	120
CTGATGGACA	AGCTGGTAAT	GAAGAAATGG	TGCAAAATAGA	TTTACCAATA	AAGAGATATA	180
GAGAGTATGA	GCTGGTGACT	CCAGTCAGCA	CAAACTCTAGA	AGGACGCTAT	CTCTCCCAT	240
CTCTTTCTGC	GAGTCACAAA	AAGAGGTCAG	CGAGGGACGT	GTCTTCCAAC	CCTGAGCAGT	300
TGTTCTTTAA	CATCACGGCA	TTTGGAAAAG	ATTTTCATCT	GCGACTAAAG	CCCAACACTC	360
AACTAGTAGC	TCCTGGGGCT	GTTGTGGAGT	GGCATGAGAC	ATCTCTGGTG	CCTGGGAATA	420
TAACCGATCC	CATTAACAAC	CATCAACCAG	GAAGTGCTAC	GTATAGAATC	CGGAAAACAG	480
AGCCACTCGA	G					491

(2) INFORMATION FOR SEQ ID NO:1480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1480:

GAATTCGGCC	AAAGAGGCCT	AATTCATTCA	GTCGTCATGA	GTTGAGTGCT	TACTACATGC	60
AAGGCACTCT	GCTAGTTATA	TTCTAATAAT	GCAGAGATAA	TTAGACATGG	TTCCCGCCCT	120
CAAGAAGCTC	ACAAAAGTAT	TCAGGAAATA	ATGCAGACTA	GTGATTTTGC	TATAAAATTA	180
TTTTTGAAGG	AAGCAGACAC	AGCAGTATTT	ACCTGTAGGT	GGAGCAAGTA	ATAAGCCATG	240
CTGTGCAATA	TATACATAAA	GCTTCTGCTT	CTCATGGGAA	TTTAGTTACA	GTGCTTGGAA	300
TGAGAAGGGG	AAGGAAAGAA	TTAACAAATG	CCAAGATTTC	TGGAGCAGAT	TGTACAGCTG	360
TGACTTTTGA	AAACAGAAAG	TAAGACCCTC	AGAAAACCAA	TGAAGTCTAA	GAGAAATAAA	420
ATTTAGTGGA	CAGGTATGAA	AAGTGTAAAT	GCGCCTAACT	ACCAGATGGA	GACCTTCAGA	480
ATGGGCTATC	CTTAGAGTCT	AGTACATCAA	GAGACCCCTC	GAG		523

(2) INFORMATION FOR SEQ ID NO:1481:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1481:

GAATTCGGCC AAAGAGGCCT AAAAAAAAAA AAAAAAGAAG ATATAAGCTA CTAGTATCAA 60
AAATGAAAGA GGGGCTGTTT CTACTGATCC TGCAGACACT CGAG 104

(2) INFORMATION FOR SEQ ID NO:1482:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 337 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1482:

GAATTCGGCC AAAGAGGCCT AAAGTGAAGT AAGAGATGCA CCTGAGAAAA CCTTGGCTTG 60
CATGGGTTTG GCAATACATC AGGTGTTAAC TAAGGACCTT GAAAGGCATG CAGCTGAGTT 120
ACAAGCCCAG GAAGGATTGT CTAATGATGG AGAAACAATG GTAAATGTGC CACATATTCA 180
TGCAAGGTGA GGAATTTGAT GTATTAAAGT ATTACTTAGA ATGGGACATT GAAGGCCATT 240
TAAGAATGAA NACGCTCATT TTATAAAAT GAGGAAATCA GTAAAAAGGA CATGAGTTCC 300
TTGCCATCTC ATTGATCATC AACTGAACA ACTCGAG 337

(2) INFORMATION FOR SEQ ID NO:1483:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 168 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1483:

CGATTGAATT CTAGACCTGC CTCGAGAGCG CGCTGTTGAA TACCCAGTAT GATGGTCCTT 60
AGCCTTCTTA GACCTTTCCT GTACCACTAC CTCTATGCCT TTTGCCAAGT CCAAGTGTTT 120
ACCAGAAATG GAACTGATGC CAGAAAGACT ACAGCAACAA TACTCGAG 168

(2) INFORMATION FOR SEQ ID NO:1484:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 478 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1484:

GAATTCGGCC AAAGAGGCCT AGCAACCGCG CCTGGCTGCC TTTTCATTTT TAAAAACGTC 60


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AGTGTGCGCTC CCACACAACA TGCAAAACCTT CCTGCCGAGC TSCGACCTTC GCCTGTCACG      120
GAACCTGGTG  CTGAGTGTGG TGAGAGTGAA TCCTGCAGCA CGTGGCGCAC TGTCGGCCTC      180
TTTCATGTTT  AGCTTTTGAT TGTGCTTATT GTCCATTGTG ATTTCTTCTT CTAAGTGTCT      240
GTTCAAGACT  TTCCCGTCTT GGCTGGAGGT GGGAGGTGCC TGCTCCTGTG TTTTCTGGCA      300
TCTTCTCTG  CTGTCTTTGT GTGTCTGCAC TCAGGGAGTT TCCCTGGGGT GTGTGCCTAG      360
AGAGGTGCTG GTGTACATT TCAACGTAGG GACAGATTCC CAGCGTGTCT TTAAGGAGC      420
TGTGCCGCTG TGTGCTCACT TGA CTGCCG GCGTTCTTGT TTCTCCAGGC CTCTCGAG      478

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(2) INFORMATION FOR SEQ ID NO:1485:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1485:

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GAATTCGGCC AAAGAGGCCT ACACACTGCA AGAACAGAGC CAAGAACCTA CCATGTACCC      60
TTTACTTGGA TTTATCATT CTGTTTGCA CATTGCTTT ATCATTCTTG TTATATTAC      120
ATATAGTTCC TTCCCTTGG ATTATTTGAG AACAACTGC AGAACTACA CCTCTTTCCC      180
CGAAGAACTA GGCATTAGCA CATTACAAGA ATACGATGAT AGAGATCAGA AGTTAAATGC      240
TGATGAGATA TTCCTGTCTA ATCCACGAAC CTTATTTTCA TGTCATCAGT TGTCCCAACA      300
GCTCGAG                                           307

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(2) INFORMATION FOR SEQ ID NO:1486:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1486:

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GAATTCGGCC AAAGATTGCT GTCCTTCAAC GTGTTTCTTA TGAAGTTATT AGTAATACTT      60
TTGTTTCTG GACTTATAAC TGGTTTGA AGTGACTCTT CCTCTAGTTT GCCACCTAAG      120
TTACTACTAG TATCCTTTGA TGGCTTCA GCTGATTATC TGAAGAACTA TGAATTTTCT      180
CATCTCCAGA ATTTTATCAA AGAAGGTGTT TTGGTAGAGC ATGTTAAAAA TGTTTTTATC      240
ACAAAAACAT TTCCAAACCA CTACAGTATT GTGACAGGCT TGTATGAAGA AAGCCATGGC      300
ATTGTGGCTA ATTCCATGTA TGATGCAGTC ACAAAGAAAC ACTTTTCTGA CTCTAATGAC      360
AAGGATCCTT TTTGGTGGAA TGAGGCAGTA CCTATTTGGG TGACCAATCA GCTTCAGGAA      420
AACAGATCAA GTGCTGCTGC TATGTGGCCT GGTACTGATG TACCCATTCA GGATACCATC      480
TCTTCCTATT TTATGAATTA CAACTCCTCA GTGTCATTG AGGAAAGACT AAATAATATT      540
ACTATGTGGC TAAACAATTC GAACCCACCA GTCCTCGAG                                           579

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(2) INFORMATION FOR SEQ ID NO:1487:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1487:

GAATTCGGCC	AAAGAGGCCT	AGATTGAATT	CTAGACCTGC	CTCGAGAGTC	ACGCTTAGTT	60
TGCCATTGTG	CCAGCTAGTG	ATATTGCTGA	TGTTTTTTGT	GGGTGTTCTT	TTAGCAAAAC	120
GTGAATGAAT	GCATGTTTAC	AGGGATGCTC	TGGACTGGAG	GATGGTGAAA	TCCATCGTGG	180
TTGTCCCTCT	CCCTGAATGT	CCTTTTGTAG	CCAGGGCATC	TTTCCAATAT	GAATTATTAA	240
GCCTTAACCT	ACATTTTTCG	ATAACTTATA	ACTCTCCATT	ATATATTTGG	TTACATTTCT	300
TAGATGTTTT	CAACATTCTT	TATTAAAGTT	ATTTTATCAG	CATCCGCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:1488:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1488:

GAATTCGGCC	AAAGAGGCCT	ACAAATGGGC	AGAAGTGAAA	CAGTCTTGTG	AGATACCTGT	60
TTTTTAAAC	TCCATTTTAG	AAAAGGAATT	AACTAGGACT	TTATATCTCT	TCGTTCAATA	120
TAATTTTAAA	GAAGAATTGT	TGAAAAGTAG	ATATGTTTGT	CCATTGTCTG	AGAATATTTT	180
GTACGTTAGC	TTGTCTCTTA	CAAAACTAA	ATGTGTTTCT	ACTTCTGATA	ATGTATGTCA	240
ATTTAAATTT	TGGAATGGCC	AAGATAAGTT	GCTCTGCATC	TGTCCTTCAT	ATGGCTCCTG	300
AGCACAGCTC	AGTGACTGGC	CCTTGCAGTG	CTTCTACCGT	TGTAATGGGT	AAAACCAGGG	360
GAAACTGCCT	TGCTCTTGAG	CTTGAGCAGG	TTAATCAAAA	GGATAGAGCT	TCCACTCTCG	420
AG						422

(2) INFORMATION FOR SEQ ID NO:1489:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1489:

GAATTCGGCC	AAAGAGGCCT	AGAGAAAGAG	AGAAAGAAAG	GAGGGAAGGA	AAGGAAGGAA	60
GGAAGGAAAG	AAGGAAAGAA	GGAAAGAGAG	GAGACTGAAG	GGCCAAGGAG	GGCATACAAT	120
GGAAGATGAG	AGCTGTGCTC	CCGGGAGGCT	TGTACTCATC	AAGAAAGAAA	GGAGAAAGAG	180
GGGGAAGAAA	AGAAAAAATA	AGAATAAAGA	AAGGAGAGAT	GAAGGAATAA	AGGAAAAATA	240
GTAGAAAGGA	AAGAAGGAGA	AGGGAGAGAA	GAAAGTAGGA	AGGAGAACTC	GAG	293

(2) INFORMATION FOR SEQ ID NO:1490:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1490:

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GAATTCGGCC AAAGAGGCCT AGTGCAACTA CAGATAAGTA AACTTCGACT GGGTTTAGTA      60
ACACCTGTCT TTAATATTTG TCAGTGTAAC TACATTGATA ACATTGACCT TTGGAAAAAT      120
TGGACTTGTA TTGTGTTATT TCTCTAGCAT ATTAGTCCTA AAAAAGTGTG AGTAATAGGA      180
GATGGAGAGG TGTTTGTGGA TTGTCATTCT GTGGTTCCTA CAGCATTCAA GTTGCGTCCG      240
TACGCTCGAG                                         250

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(2) INFORMATION FOR SEQ ID NO:1491:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1491:

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GAATTCGGCC TTCATGGCCT AATCTTAGA AATAAGCCA CTATCATGCA GGTTATTTAC      60
AAGTAAAAAC ATGGAGTCAG CCCAGTAGAG AAACGTTCAA ATAGTGTGGC TCCTGCTCTG      120
CCACGTTCTG TTTATGACTT TGGATATTTT ATTTATCCTT TCTGGGGTAG TTTTCAACT      180
TTAAGGTCCT AATAAACTTT TAGATTTTAT GACCTGTCCT CTTTAGCCCT GTAAGATTTA      240
AATATTATAA AGAACCTGAT TTCAAAGACA CTGGTAAACT TGGACAACTA AACAAGTCCA      300
AGTATGGTAC TTATTTGTGT GTGTGCATAT ATTAACCTTA TGCATATGCT GTTTTCACAC      360
CTATTTAAAC TGTTTTTGAA AAACGTATAT ATCAGTTTTT GGAAAACAGA AGAAGATTTT      420
AAACGGCTAC TCGAG                                         435

```

(2) INFORMATION FOR SEQ ID NO:1492:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1492:

```

GCGATTGAAT ACATGTTCAA TAAGGACAAT GGACAGGCAC CTTTACCAT CACTCCTGTG      60
TTTTCAGATT TTCCAGTCCA TGGGATGGAG CCCATGAACA ATGCCACCAA AGGCTGTGAC      120
GAGTCTGTGG ATGAGGTCAC AGCACCATGT AGCTGCCAAG ACTGCTCTAT TGTCTGTGGC      180
CCCAAGCCCC AGCCCCCACC TCCTCCTGCT CCCTGGACGA TCCTTGGCTT GGACGCCATG      240
TATGTCATCA TGTGGATCAC CTACATGGCG TTTTGTCTTG TGTTTTTGG AGCATTTTTT      300
GCAGTGTGGT GCTACAGAAA ACGGTATTTT GTCTCCGAGT ACACTCCCAT CGATCTCGAG      360

```

(2) INFORMATION FOR SEQ ID NO:1493:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1493:

```

GAATTCGGCC TTCATGGCCT AAGCAGACAA TATAGTAGTA ATTTAAATTT TTGTTTCCTG      60
ACTTTCCTGTA GTCCCTAAAC AAACAACAAA AAATCCTAGT AATCTTAAAC TTTTACATTA      120
ATAGAGATCC AAGAGAAAAA AAGCCATTTT TCACCATTGT GGACCCAAAT AAATCATAGA      180
CATGGTATTA AGAAGCCCTT TTCAGTCTGG TTGCAGTATT ATTTTCCTAC CTTCCTTTT      240
CCTGTTCCCT GCTGTATGCC CACAGCTCGA G                                     271

```

(2) INFORMATION FOR SEQ ID NO:1494:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 310 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1494:

```

GAATTCGGCC TTCATGGCCT AATGGGTCAG AAATTGGGC CTGGCTAAGT GGATCCTCCA      60
CCCCAGGGTC TCTCACAAGG CTGCAATCAA AGGGCTGACT AGGACTTGA ATCTCATTG      120
AAAGTTAGAT TGGGGAAGGA TCTGCTTCCA AGCTCACTCA GTAGTTACTG GCAGGATTAG      180
GTTTCTCCAA GGTCGTTGGA CTAAGGGTCT CAGTTCTCTA CTGACAGTTG GCCTGAGGCT      240
GCCTTCAGTT TCTTGCCATG TGGGCCTCCC CAGCATAACT GTTTACTTCA TCAAAACAAA      300
CAAATCGAG                                     310

```

(2) INFORMATION FOR SEQ ID NO:1495:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 138 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1495:

```

GAATTCGGCC AAAGAGGCCT ACGTCGATTG AATTCTAGAC CTGCCTCAGC TCTAATTATG      60
GTTTCATGTTA GATTGTCTGC CCTCCTCTT CCTCTCTCT TTTGGGGAAA GATAATAGCA      120
CTTAATAACG CCCTCGAG                                     138

```

(2) INFORMATION FOR SEQ ID NO:1496:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 102 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1496:

```

GAATTCGGCC AAAGAGGCCT ACAAATTGT TCCTTTTACG TACGACAGAC TTCTGAAATG      60
GTAGTAGTAG TAGTGCCCTT TTTTCTCTC TTTTAGCCC AG                                     102

```

(2) INFORMATION FOR SEQ ID NO:1497:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1497:

```
GAATTCGGCC AAAGAGGCCT ATTTGTTTCT TTGTACTGCC TAACTTTAGA AAGACCTGNA      60
ANCGGTANCA TGAAAACATT TTTAGAGAGA ATTACCAGGC ATTTTGGTA GAATGAGTGT      120
TTAATGGAAC AGTCCAGAGA ACTCATCAA GATGTTTATT AAAACGCGCA GACCTGCTCC      180
AATTAAGGCG CCAGTCAGTG GTGTTAACAG TGAAGGGACT GTTCCAGAGG CGTGCTGCAC      240
GGGACGCCCA CCCCAAATAC AAATGGTTTG CCAGTAGCTC ACAAATGAAC CCCATTGCCT      300
TGCACTTAAG CTCCTGAAG CACATACATA TCCTGCTTTG TGCTTCCGC CCTATAGTAA      360
ACGCAACCA ATGGAGATGT GAAGCAATCT AATAGCAACA AGGCAACCT CTACTTCCTC      420
TAAAGAGGAT TGCATCCTCT TGCTATCTTT GCCGATGCTC TCCTACAGAC CCATCCGCTC      480
GAG                                                                                   483
```

(2) INFORMATION FOR SEQ ID NO:1498:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1498:

```
GAATTCGGCC AAAGAGGCCT AAAATTTCAA TAGGCTATAG AGTTTCCAT GAGAGTGTGT      60
GTGTGTGTGT GTGTGTGTGT GTGTAAAGAA CTCTTACATT TCAGTGAGAA AATATTTTCA      120
TTGAAAGGAA ACACAGAACT CGAG                                                                                   144
```

(2) INFORMATION FOR SEQ ID NO:1499:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1499:

```
GAATTCGGCC AAAGAGGCCT AAAATAACTG TCCAATTAAC TGAACACTGA GGTAGCTGGG      60
TACAGACTTT AGCGGCTACA TTTGACAAAC ATTGCAATTA CAAGCAGCAA CACAAACCAA      120
CCTTGGGATG GGGATAGAAA TCTTTTCNTT CTTTCNTTCTT GGGGGTTTGA GACAGAGTCT      180
CGCTCTGTCA CCCAGGCCGG AGTGCACTGG CGCAATCTCC GCTCACTGCA AACTCCACCT      240
CCTGGGTTCA AGTGATCCTC CTGCCTCAGC CTCCCAAGTA GCTTGGATTA TGGGTGCCCA      300
CCACCATGCC TGGCTAATTT TTGTATGTTT GATAGAAACG GTGTTTCACC CTGTTGACCA      360
GGCTGGCCTT GAGCTCCTGA CTTCAAGTGA TCCACCTGCC TCAGCCCCCC GACTCGAG      418
```

(2) INFORMATION FOR SEQ ID NO:1500:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1500:

```
GAATTCGGCC AAAGAGGCCT ACAAAGACCA AGGTATCACA TTCTGCCATT AGCTGCTACC      60
TCTCCCTTCC CCATTTTCAG ACAGATTGAG CCCACTTTTT GTGTCCTCCT CTGCTCTTAA      120
GCTGTTTCTC ATCGTGGGTG CTCAGCAACT TGTCTGCTCT CACTCTAGTT TCTATTGCT      180
TCCCTGAAAT TAGCCTTTAA CTATGCCAG ACAAGCCAGA GCCTTGCCTA AACTTCTAAT      240
TCCTCTGTGC TTCTTAGTGT ATCCTTCTG CTGCTTGCC TGCCTGCCTT CCTGCCTGCT      300
TGCTGCCTT ACTGACCCTT TGCCCCACGC TCTCGAG                                337
```

(2) INFORMATION FOR SEQ ID NO:1501:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 105 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1501:

```
GAATTCGGCC AAAGAGGCCT AAACCGTCGA TTGAATTCTA GACCAGCCTC ATCTCCTGTT      60
CCTCTCTCCC TCCCAACTAT GTTGGCCTCC CTGCTGCTCC TCGAG                                105
```

(2) INFORMATION FOR SEQ ID NO:1502:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 701 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1502:

```
GAATTCGGCC AAAGAGGCCT ACTGTGAACC TAAACTCCT ATAAAGAAAA GTAAAGTCTT      60
AAAAACAAAC AAATACACAG CAACAATCTT ATTTTCCCCA GCCTGTCTTA TGTTAGGGTG      120
CAGATGTGAT TTCTGTGTGG CTAATCAGAT GCCCTTGTGT GAGAGACTGA TTTGAACAGA      180
GGCAGGGGCA TCCATCTTTC TAGTGTGAGT CACAGCAGAA GCAGTGAGGT CCTGGTGTCT      240
GTCGCTGCAG TGGTGGCTTT TGATACAGGA GTTCCCTGAT GGCAGTAGCT TCTTTGTGGG      300
TTCAGTTCTG TTGTGTGGTT CTGCAAGTTC AGCTTAGAGT CTGTTTCTTC AGCTGTTTCA      360
ATGACCTCT GAGCTGTCTA CCATGAAAAA TTCTATCCTG CTTACACTAA TTAGAGCCAA      420
TCCTGTTATT TACAAATGAA TATCCTGACC AGTAATGAAG GTCTAGACTT AACTGTAATA      480
TTTTATGACT TAAATTGTTG GCATATGTGA AAACCTTTTG TTTATTCTAA ACTTTTTTGT      540
TGTGTTGTA AAATAAAACA TTTATGAAAA GCGCACCAA AAGGATAACA AATGAGAGTA      600
ATGCAACATA CAGGCACCAG CAACTCAGGC CAGGGAGATG ATATATGAGC ATCCCAATC      660
TCCCCTTTAC ACTCCCTCAA ATAACCTAAT CAAGACTCGA G                                701
```

(2) INFORMATION FOR SEQ ID NO:1503:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1503:

GAATTCGGCC TTCATGGCCT AGGAACTAGG TGACTTTGGG GCTCATCTCA CAAGTTTCCT	60
TACACTTAGG GATCAGTCTT TTGCTTCCTG TTGTCCTCTG CCTGAAAGTA GTTGCCAAGT	120
TGTACTGTTT TATATATCCA CCACAGCATG AGTTAAACCA AAGTCTGGAT CAGCAGACTG	180
CCAGATTTT TTTTAACAAA TTTATTAATC AATACATTTT GTCCATGTCT ACAGTTGTTT	240
ATGGGGGAGA ACTCGAG	257

(2) INFORMATION FOR SEQ ID NO:1504:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 277 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1504:

GAATTCGGCC TTCATGGCCT AGGGGACCTT GGGAGAATGT AATCCCTGCC CCTAGTCTCA	60
GTTTCTGCAT CCACGGAAGA GGGGTGAAGA TGGTCCCTAC CCCTCCAGAA TGTTCTTTT	120
TTTTTTTTTT AAAAAAAAAA AAAAAAAAAA AAAGTACGTT ATGTTTTCAG ATAAGAACAC	180
TTCTTCATGG ATGACTTGAA ATAATGCCA TGGTCCCTAA GTTTTCCTCT CTGTAGATGA	240
ATGATATAGC TCAGTATCTA AGCAGTGGAT CCTCGAG	277

(2) INFORMATION FOR SEQ ID NO:1505:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 341 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1505:

GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAGCCTCCC AAGCTGCTGG TATTACAGGC	60
GTGAACCACT GCACCTGGCC TAATACGATA TTCTTACAAT TTAAAAATG AAAGCAGAGG	120
AATGGTGGCA GGAAGCTGA CATTTTAAGA GTTCACTTCC TTGTAGTTAT CACAGTTAAT	180
TCTTACTGTT AGAATAAGTG GTAACCTGCC AAGGTCACAT TGCTAGATGT CAGAGCAGAA	240
ATTAGAAATC AGGTCTAGCC AAGGCCATCA CACTTCTCAG AGCATTAAAC ATTCAATTCA	300
GTTAGTGTTT ATTGAACACC TATTGTGTTT TGGCCCTCGA G	341

(2) INFORMATION FOR SEQ ID NO:1506:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 270 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1506:

GAATTCGGCC	TTCATGGCCT	AGGCATTTTG	TCTCTAGAAT	TACCCACCCG	TTCCTGCGCT	60
CTACGGTTCT	CCATGCCCCC	TCCAGTTTGG	GGGTCTAAAC	CGAACAGGAG	AGGTGCAGGG	120
GACCAGGAGG	TGTCCTGGCA	CAAAGGTTCT	GGGTCTCCC	TGGCAAGGGG	TCCCAGGGCC	180
TGGAGCCCGA	GGCCAGCCA	AAAGCACACA	GCATCAAAAC	ATGTTTTTAG	TGGGAAGCTC	240
CAGGCCTGC	CCCTCCCCGG	GGGCCTCGAG				270

(2) INFORMATION FOR SEQ ID NO:1507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1507:

GAATTCGGCC	TTCATGGCCT	AGAGCAGGAA	GATTGTGTGA	GTGCTGGGGT	TGGGGGGTGC	60
CCAAGTTGGG	AACCACTGGA	GGGAGAGAGA	GGTAGGAGGT	AGATGGATGG	AGATCAAAGG	120
CCAGGCCTGT	GGCCAAGGGG	GCTGCTAACC	CTTCAACCCCT	GTGTTAGCCT	GTACACTCAC	180
CAGGCCAGGC	TCAGCAGGCG	GGCTGTTTAC	CTCCTGGCAG	CAAATGGTCC	AGAATGTGCC	240
CTCGCTGCAG	CCCAGCTGGC	TCCAGAAGGG	GGACCACAGA	GGCTGGAGCT	ATGCATGCAC	300
AGTGCTTTCT	CCCAACCTTG	CTTCTGAGAA	AAGTGTCCTT	GCGAGGGCCC	TGGAGGAGGG	360
AGCTAGGGAC	CAGCAGAAGG	GCCTAGGTTT	CTGTAGCATC	ATTTTATGCC	CTGGCTGAAT	420
CTGGGAAGCA	CCTGGTGGCT	TTAATATTCC	CGTTAGCTCG	AG		462

(2) INFORMATION FOR SEQ ID NO:1508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 694 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1508:

GAATTCGGCC	TTCATGGCCT	AGTCACAATC	CACTTAAAGA	AGTTTGGTTA	TATTTCACTG	60
AAAATTTTCT	TCCAGAGTAG	GTTTTTTTTC	GTGGGTTGGG	GGGTAACTTT	ACTACAATTA	120
GTAAGTATGG	TGCAGAAATTT	CATGCAAATG	AGGAGTGCCA	GCAGTGTGAT	AATTTAAACA	180
TATTTAAACA	AAAACAAAAA	AAATGAATGC	ACAAACTTGC	TGCTGCTTAG	ATCACTGCAG	240
CTTCTAGGAC	CCGGTTTCTT	TACTGATTT	AAAAACAAAA	CAAAAAAAA	TAAAAAAGTT	300
GTGCCTGAAA	TGAATCTTGT	TTTTTTTAT	AAGTAGCCGC	CTGGTTACTG	TGTCCTGTAA	360
AATACAGACA	CTTGACCCCTT	GGTGTAGCTT	CTGTTCAACT	TTATATCACG	GGAATGGATG	420
GGTCTGATTT	CTTGGCCCTC	TTCTTGAATT	GGCCATATAC	AGGGTCCCTG	GCCAGTGGAC	480
TGAAGGCTTT	GTCTAAGATG	ACAAGGGTCA	GCTCAGGGGA	TGTGGGGGAG	GGCGGTTTTA	540
TCTTCCCCCT	TGTCGTTTGA	GGTTTTGATC	TCTGGGTAAA	GAGGCCGTTT	ATCTTTGTAA	600
ACACGAAACA	TTTTTGCTTT	CTCAAGTTTT	CTGTTAATGG	CGAAAGAATG	GAAGCGAATA	660
AAGTTTACT	GATTTTGTAG	ACACTAGACT	CGAG			694

(2) INFORMATION FOR SEQ ID NO:1509:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 490 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1509:

```
GAATTCGGCC TTCATGGCCT AATGAGGTTT TATCTAGAGG TGATGGGAGA CAGTGACAGA      60
TCATCAGGCA TTAGATTCTC ATAAGGACTG CGCAACCTAG ATCCCTTGAA TGAACAGTTC      120
ACAATAGGGT TCACTCTCCA ATGAGAATCT AATGCTGCCG CTGATCTGAC AGGTGCCAGA      180
GCTCAGGCGG TAATACGAGA GGCTGGAGAT ACAGATAAAG CTTCAGTTGC TTGCCCGCCA      240
CTTACCTCCT CTTGTGCGGC CCAGTTCCTA ACAGGCCACA GACCGCTACC AGTCCATGGC      300
CTGGAAGTTG GGGACCCCTC TACTGGGATA TTTATAATTG CATATGTGGT TACCTAATAT      360
TTCCATGATA CAACACTGGT CTAGATTCTA GGCCATTCTC CTTCAAAAAG AACCTGCTT      420
CCTTACAGTT TACTGTGTTA GCAGCAATGT TTTCTACCCC TTCTTAAAT TTTACGCCAC      480
CACACTCGAG                                         490
```

(2) INFORMATION FOR SEQ ID NO:1510:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 313 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1510:

```
GAATTCGGCC TTCATGGCCT ACTCTCTCAT TCCTACCCTC CTCCCCTCCA CTCACGCTCC      60
TCCCAATCCC CAAGTCTCTC TCATTCCCAC CTTCTCTCCT TCCTCTCCTC ACGTCTCTCC      120
CTATCCCCGA GCTCCTCTCT CATCCCTACC CTCCTCCCCT CCACTCACGC TCCTCCCAAT      180
CCCCAAGGTC CTCTCATTCC CACCTTCCTC CTTCTCTCTC CTCACGCTCC TCCCTATCCC      240
CGAGCTCCTC TCTCACTCCC TCCCTCTCTC CATGCTCCTC CCCCCTCTCC TCATGCTCCT      300
CCCCATCCTC GAG                                         313
```

(2) INFORMATION FOR SEQ ID NO:1511:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 354 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1511:

```
GCCGGGTGGG CCGGAGGTGG CGCGGCCGCA CGGCTTTGTT CCGGAAAGCC CTTAGGTGGA      60
GAGCGATGTG GGGCGCGGCA GGGGGATCGC GTAGAGGAAC CTTGCGGCAC CGCCTCTCCG      120
GGTCTGGGAA TCTGCTGAAC TCCTTGCTCT TCTTGGGGTC CCTCGAACGC CCCAGCTAAG      180
AAGGGCGGGG GCCTTGCCAG GGC CGCAGCA ACATGACGTT CAAGGTCTTC CTGTGGCTTC      240
TGTAAGAAA TGTTACGTG GGAGCCTGTC CACATGGGCT GTACTAAGGA TCTGGCACGA      300
GGAAGAAATA TCACTGCAGA ACCTGAAGCC CTCGGTTGGA AGGGTCACCT CGAG      354
```

(2) INFORMATION FOR SEQ ID NO:1512:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1512:

```

GAATTCGGCC AAAGAGGCCT AGAGCAGCTT GGCTAAAAGT AAGGGTGTCTG TGCTGATGGC      60
CCTGTGCGCA CTGACCCGCG CTCTGCGCTC TCTGAACCTG GCGCCCCCGA CCGTCGCCGC      120
CCCTGCCCCG AGTCTGTTC CCGCCGCCCA GATGATGAAC AATGGCCTCC TCCAACAGCC      180
CTCTGCCTTG ATGTTGCTCC CCTGCCGCC AGTTCTTACT TCTGTGGCCC TTAATGCCAA      240
CTTTGTGTCC TGGAGAGTC GTACCAAGTA CACCATTACA CCAGTGAAGA TGAGGAAGTC      300
TGGGGGCCGA GACCACACAG GTGGGAACAA GGACAGGGGG ATTTAAGCAG TCAAAAGGAA      360
AAACATGTTA AGACCCTAGA CTTGTATATT GACACACAGA ACTCGAG      407

```

(2) INFORMATION FOR SEQ ID NO:1513:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1513:

```

GAATTCGGCC AAAGAGGCCT ACATTCATAC AATTACAGAA TTCAAATATT GCAAAAGGAT      60
GTGTGTCTTT CTCCCCGAGC TCCCCTGTTC CCCTTCATTG AAAACCACCA CGGTGCCATC      120
TCTTGTGTAT GCAGGGCTAT GCACCTGCAG GCACGTGTGT ATGCACTCCC CGCTTGTGTT      180
TACACAAGCT GTGGGGTGTT ACGCATGCCT GCTTTTTTCA CTTAATAATA CAGCTTGGAG      240
AGATTTTGT ATCACATTAT AAATCCCACT CGCTCTTTT GATGGCCACA TAATAACTAC      300
TGCATAATAT GGATACGCCT TATTTGATTT AACTAGTTCC CTAATGATGG ACTTTTAAGT      360
TGTTTCCTTT TTTTTCTTT TTTGCTACTG CAAACGATGC TATCTAGGCC TCTTTGGCCG      420
AA

```

(2) INFORMATION FOR SEQ ID NO:1514:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1514:

```

GAATTCGGCC AAAGAGGCCT ATGGAAATTC AAGACCTGAT GTTTGAGGAG ATGAGGGAAA      60
CTCTTAAAAA TGACCTAAAA GCAGTTTTAG GAGGAAAAGC TACAATACCT GAGGTAAAGA      120
ATTCAGAGAA CTCCAGTAGT AGGACAGAGT TTCAGCAAAAT AATCAATTTA GCATTACAAA      180
AAACAGGGAT GGTAGGGAAA ATAGAAGGAG AAAACTCTAA AATAGGTGAT GATAATGAAA      240
ATTTAACCTT TAAATTAGAA GTAAATGAGC TGAGTGGTAA ATTAGACAAC ACTAACGAAT      300
ACAATAGTAA TGATGGTAAG AAATTACCCC AGGGTGAATC ACGAAGTTAC GAAGTCATGG      360
GAAGTATGGA AGAAACCTTA TGCAATATAG ATGACAGAGA TGGAAATCGC AATGTCCATT      420
TAGAATTTAC AGAAAGAGAG AGTAGGAAGG ATGGAGAGGA TGAATTTGTC AAAGAAAAAC      480

```

TCGAG

485

(2) INFORMATION FOR SEQ ID NO:1515:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1515:

GAATTCGGCC	AAAGAGGCCT	AGGCACAGAA	GGTGGTGAG	TGTGATCAA	TCTAGTCTCA	60
CTCCCACTTT	TTAGTCTCAC	TCCTACTTTT	GTCCACCACC	CAGGCACGGA	GAGAAAGGAA	120
TGTTTAGCAC	AAGACACAGC	GGAGCTCGGG	ATTGGCTAAA	CTCCCATAGT	ATTTATGGTG	180
GCCGCCGGCG	GGGGCCCCAG	CCCAGCTTGC	AGGCCACCTC	TAGCTTTCTT	CCTACCCCAT	240
TCCCGGCTTC	CCTCCTCCTC	CCCTGCAGCC	TGGTTAGGTG	GATACCTGCC	CTGACATGTG	300
AGGCAAGCTA	AGGCCTGGAG	GGTCAGATGG	GAGACCAGGT	CCCAAGGGAG	CAAGACCTCG	360
CGAAGCGCAG	CAGCCCCGGC	CCTAGGCCTC	TTTGCCCGAA			400

(2) INFORMATION FOR SEQ ID NO:1516:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1516:

GAATTCGCGG	CCGCGTCGAC	GTGACGCGG	CCGCGAATTC	GGCCAAAGAG	GCCTACCCAT	60
GTCAATCAAG	ATGGGTGATT	ATGAAATGCC	AGACTTCTAA	AATAAATGTT	TTGGAATTCA	120
ATGGGTAAAT	AAATGCTGGC	TCGAG				145

(2) INFORMATION FOR SEQ ID NO:1517:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1517:

GCTGGACCTC	CTGTGCAAGA	ACATGAAACA	GCTGTGGTTC	TTCCTTCTCC	TGGTGGCAGC	60
TCCAGATCG	GTTCTGTCCC	AGGTGCAGCT	GCGGGAGTCG	GGCCAGGAC	TGGTGAAGCC	120
TTCCGAGACC	CTGTCCCTCA	CCTGCACTGT	CTCTGGTACT	TCCGTCAGAA	GTGTTAGTTA	180
CGACTGGAGT	TGGCTCCGGC	AGTCCCCGGG	GAAGGGACTG	GAGTGGCTTG	GAGAGATTGA	240
TTACAGGGGG	AGAGGCAATT	ACAACCCGTC	CCTCGAG			277

(2) INFORMATION FOR SEQ ID NO:1518:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 161 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1518:

GAATTCGGCC AAAGAGGCCT ACTCATGCAC CTAATTGGAT CCTATCTTTG TGTGTTAGC	60
TGGTTATTAT GCAGACTTTA TTATGTGGTT GTTTATAGT GTCCATAACC TATGTACTTA	120
AGTTTGT TTT TGTGGTGGCG CTCCAATTA GGGCTCTCGA G	161

(2) INFORMATION FOR SEQ ID NO:1519:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 561 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1519:

GAATTCGGCC TTCATGGCCT AATATAAAAC AATGTTTTTC AAGGCATTAT ATAATAGGCT	60
AAGGACAGTG ACCTCCAAGA GACAGCAAAC AAGGTAATAC CTGTGACTGC TCCAGCTTAC	120
TGCCTTGAGA GAATTAATAG TAGGTTTGTG GTACAGGGAG GGAGLATCCA GTCAGAGCCC	180
AGCGGACTTG CTGAATTAAG GAAATGGAGC TGAGAGTCCA GAGAGACCAA CATGGCTAAA	240
GTTGTCATGA CAGAGCACTC AGAACTAGAG AGCTGCACAG CAACATAACC TAAGAGCTCT	300
GAAGATAATC TCCCTCAAT ACTCAGCTGA GTACTGATCA ACATATATGT GTGAGGAAGC	360
TATCTGAGGC TGACAAAGAA CTGCCTGAAG AGATTAGAGG GAACAGTACT TGGCACTCAC	420
ACAGAATTGG AAAGTGTACC TGTCCCAACC AGCCAACTG GAAAAACCTC AGGATTCATG	480
GGGTACTCAG AAAGGACTTG CATCAGGTAT GGGGAATAAT TAGCCCTAGA CAGAGCACTG	540
CTCTAATCCC ATCCACTCGA G	561

What is claimed is:

1. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

2. An isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ

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or a complement of said sequence.

3. An isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID

NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172,

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or a complement of said sequence.

4. An isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109,

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or to a complement of said sequence.

5. An isolated protein encoded by an isolated polynucleotide of claim 1.
6. An isolated protein encoded by an isolated polynucleotide of claim 2.
7. An isolated protein encoded by an isolated polynucleotide of claim 3.
8. An isolated protein encoded by an isolated polynucleotide of claim 4.